Proposed Clean Air Rule (Chapter 173-442 WAC)

Washington Department of Ecology

Comments by Puget Sound Energy

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Section 1: Introduction

I. SUMMARY OF RULE

On May 31, 2016, the Washington Department of Ecology ("Ecology") proposed a revised draft Clean Air Rule ("CAR") to reduce greenhouse gas ("GHG") emissions within the State of Washington.[1] Ecology issued CAR pursuant to a directive from Washington Governor Jay Inslee directing Ecology to promulgate regulations to achieve the state's statutory GHG emission reduction goals.[2] Specifically, Washington has committed to reducing state GHG emissions to 1990 levels by 2020; 25 percent below 1990 levels by 2035; and 50 percent below 1990 levels by 2050.[3]

The proposed CAR applies to certain sources that meet prescribed GHG emissions thresholds, including (1) stationary sources (e.g., electric power generators, landfill and waste operators, chemical and material manufacturers, etc.) located in Washington; (2) petroleum product producers located in or importing to Washington; and (3) natural gas distributors located in Washington.[4] Additionally, sources that fall below the applicable GHG emissions threshold may choose to participate voluntarily in the program.[5] The threshold for the first compliance period, from 2017 to 2019, is 100,000 million metric tons of carbon dioxide equivalent per year ("$MtCO_2e$/year").[6] Starting in 2020, the threshold is reduced every three years until reaching 70,000 $MtCO_2e$/year in 2035.[7] Once a source exceeds the emissions threshold, the source is subject to CAR and must comply thereafter. However, a source may be eligible to exit the program if its GHG emissions fall below 50,000 $MtCO_2e$ for three consecutive years.[8]

Due to economic concerns about CAR's impact on entities that participate in global markets, Ecology has designated some sources as "energy-intensive, trade-exposed industries" ("EITEs"). EITEs include pulp and paper mills, aluminum, chemical, steel, and cement facilities, and other manufacturers.[9] EITEs, as well as petroleum product importers, are given an additional three years (i.e., until the second compliance period beginning in

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[1] *See* Proposed Wash. Admin. Code ("WAC") 173-442 (May 31, 2016).

[2] *See* Washington Governor Jay Inslee, Inslee Directing Ecology to Develop Regulatory Cap on Carbon Emissions (July 28, 2015), http://www.governor.wa.gov/news-media/inslee-directing-ecology-develop-regulatory-cap-carbon-emissions (last visited July17, 2016) ("July 2015 Directive").

[3] Rev. Code. of Wash. ("RCW") 70.235.020(1)(a)(i)-(iii).

[4] Proposed WAC 173-442-010. Notably, CAR exempts Washington's only coal-fired power plant, the Centralia Power Plant ("Centralia"). *See* Proposed WAC 173-442-040(1)(d).

[5] Proposed WAC 173-442-030(6).

[6] Proposed WAC 173-442-030(3).

[7] *Id.*

[8] Proposed WAC 173-442-030(5).

[9] Proposed WAC 173-442-020(1)(l).

2020) before CAR would apply to them.[10] EITE covered parties also are offered an alternative, and potentially less stringent, compliance pathway that entails efficiency-based, rather than massed-based, GHG emission reduction targets.[11] Non-EITE covered parties, on the other hand, must reduce their emissions by 1.7 percent from their baseline GHG emissions each year until 2035.[12]

If a covered party has attributed emissions above its emission reduction pathway level, the party must acquire emission reduction units ("ERUs") from other sources equal to the emissions in excess of its pathway level.[13] An ERU represents one $MtCO_2e$/year.[14] The ERUs can be generated by (i) other affected sources that reduce emissions below their emission reduction pathway level;[15] (ii) acquiring allowances from other states or provinces that have established, multi-sector GHG programs (such as the California Air Resources Board ("CARB") cap-and-trade program);[16] or (iii) a limited list of activities that reduce or abate GHG emissions in Washington.[17] At the end of each three-year compliance period, covered parties must submit a compliance report to Ecology.[18] The compliance report must contain: (1) a record of ERUs generated; (2) a record of ERUs banked; (3) a record of ERU transactions; and (4) documentation that a third-party verified the compliance report.[19] Ecology plans to develop a registry to track ERUs.[20] Ecology also proposes to create an ERU reserve to encourage economic growth and support environmental justice.[21]

Ecology estimates that the proposed CAR will cost between $1.4 billion to $2.8 billion over 20 years.[22] Ecology assumes that covered parties will be able to directly reduce their emissions at a marginal cost of $23 to $57 per ERU.[23] Ecology projects that covered parties also will have the option of reducing emissions through projects at a marginal cost

[10] Proposed WAC 173-442-030(2).

[11] Proposed WAC 173-442-070.

[12] Proposed WAC 173-442-060(1)(b).

[13] *See* Proposed WAC 173-442-100.

[14] Proposed WAC 173-442-020(1)(m).

[15] Proposed WAC 173-442-110(1).

[16] Proposed WAC 173-442-110(3); Proposed WAC 173-114-170.

[17] Proposed WAC 173-442-110(2); Proposed WAC 173-442-160; Proposed WAC 173-442-150.

[18] Proposed WAC 173-442-210.

[19] *Id*.

[20] Proposed WAC 173-442-230.

[21] *See* Proposed WAC 173-442-240.

[22] Preliminary Cost-Benefit and Least-Burdensome Alternative Analysis, Chapter 173-442 WAC Clean Air Rule, at vi (June 2016) ("Cost-Benefit Analysis").

[23] *Id*. at 14.

of $5 to $29 per ERU and/or obtaining allowances or renewable energy credits ("RECs") at a marginal cost of $3 to $14 per ERU.[24]

II. COMPANY BACKGROUND

Puget Sound Energy ("PSE") is Washington's oldest and largest local energy company providing both electric and natural gas service to its customers. PSE serves approximately 1.1 million electric customers and 790,000 natural gas customers. PSE is located primarily in the central Puget Sound, but stretches from the Canadian border south to Lewis County, and from Kitsap and Thurston Counties east to Kittittas County. PSE strives to provide safe, dependable, and efficient energy service.

PSE has a varied electric resource mix. In 2013, 54.6 percent of PSE's electric supply was PSE-owned, and the remainder was from market purchases. Of PSE-owned resources, there are nine natural gas electric generating facilities spread across Washington. PSE also holds partial ownership of the Colstrip coal electric generating facility ("Colstrip") in Montana; two hydroelectric generating facilities that can produce 254 Megawatts ("MW") of electricity; and three wind farms with a total capacity of 773 MW. The American Wind Energy Association recognizes PSE as the second-largest utility owner of wind energy in the United States.

As a leader in the Northwest, PSE works hard with its customers to promote and implement energy efficiency programs. In 2013 alone, PSE's energy-efficiency programs saved enough electricity to power more than 25,000 homes and enough natural gas to heat more than 6,000 homes. Since 1979, no other Northwest utility has helped its customers save more energy than PSE. PSE's energy-efficiency programs have helped PSE customers conserve nearly 5 billion kilowatt-hours ("kWhs") of electricity and almost 50 million therms of natural gas.

PSE has stepped up to support its customers in pursuing low- or no-carbon energy options, such as solar, wind, and anaerobic digesters. PSE participates in Washington's renewable energy system cost recovery program. Through this program, PSE assists more than 4,500 customers in installing renewable energy systems. PSE also runs a Green Power Program, with more than 45,000 current customers. In 2013, the program purchased more than 380 kWhs of renewable power. The program's resources include wind, landfill gas, low-impact hydro, livestock methane, and solar.

PSE has an obligation to serve all of its customers and must remember that price matters to its customers. PSE must recognize that the economic resources of its customers differ across PSE's service area. Based on 2014 statistics, approximately 20 percent of PSE's customers would fall below 150 percent of the poverty level for a family of three. For these lower-income customers, electricity and natural gas price increases have disproportionate impacts. PSE must account for this fact in long-term planning.

[24] *Id*. at 14–15.

III. OVERVIEW OF PSE COMMENTS

PSE agrees with Ecology that climate change is an important environmental problem that needs to be addressed. However, PSE believes that CAR, as structured, is beyond the scope of Ecology's legal authority. Further, Ecology's cost assumptions—especially those concerning future ERU prices—are poorly grounded and inaccurate. If implemented as proposed, CAR would harm Washington citizens and businesses without achieving real climate benefits.

PSE urges Ecology to continue working on this rule. CAR is not ready to be implemented and requires more technical analysis and legal and policy consideration. In particular, the rule suffers from several critical core flaws with respect to the electric and gas utility sectors:

CAR Will Increase Net Regional Emissions from the Electric Power Sector. As proposed, CAR will cause increased GHG emissions in the electric power sector on a regional basis. Washington's electric power sector is not an island: it is connected to the electric power sectors of other western U.S. states and Canadian provinces (which comprise a power grid known as the Western Interconnection). Electric power prices are very competitive throughout this region. Reduced electric generation in Washington as a result of CAR will be more than offset by increased generation in other parts of the Western Interconnection. While Washington's GHG emissions may decline, emissions in other parts of the region will rise. The net result will be a regional increase in GHG emissions from the electric power sector.[25] This is a serious unintended consequence from CAR that Ecology must address before finalizing the rule.

CAR Will Lead to Unacceptable Rate Increases for Washington's Gas Utility Customers. As proposed, CAR creates a significant risk for unacceptable rate increases for gas utility customers. Natural gas local distribution companies ("LDCs") have limited options for reducing GHG emissions and will need to rely on purchasing ERUs to comply with CAR. Washington's current REC market cannot meet future demand for ERUs.[26] It is uncertain where the additional ERUs will come from (or at what cost): Ecology has developed no information, nor provided any analysis, to show that ERUs will be available from other sources in sufficient quantities or at reasonable prices. Ecology's assumptions about the availability of external market allowances (e.g., from the CARB market) and in-state offset credits are purely speculative. While ERU markets may develop over time, currently no such market exists. CAR requirements begin as early as 2017—before an ERU market can develop and any supply or price projections can be made. This means

[25] *See* Figure 2 (Reproduced as Appendix E); *see also* Appendix F ("CO_2 Offset Price Scenarios").

[26] For instance, PSE's limited surplus RECs under the Washington Energy Independence Act ("EIA") will be depleted by the end of 2018. Generating ERUs from future surplus RECs will cost upwards of $107/ERU, making RECs an extremely costly, and thus poor, compliance option.

that LDCs face uncertain, and potentially significant, compliance costs. Customers ultimately would bear these costs in the form of higher natural gas rates.

As the largest dual electric power and gas utility in Washington, PSE faces especially profound effects from CAR. The uncertainty of the ERU market, in particular, could cause significant issues for PSE's customers. Accordingly, PSE respectfully submits the following comments on legal, implementation, and policy concerns with the proposed CAR. Should Ecology proceed with finalizing CAR, PSE offers several recommended changes to the rule.

Section 2: Legal Comments

I. CAR VIOLATES WASHINGTON STATE LAW

i. Ecology lacks the statutory authority to promulgate CAR

As a Washington state agency, Ecology has only the authority granted to it by the state legislature.[27] Under the Washington Administrative Procedure Act ("APA"), an agency rule is invalid if it "exceeds the statutory authority of the agency."[28] The state legislature has prohibited Ecology from adopting rules "that are based solely on a section of law stating a statute's intent or purpose, on the enabling provisions of the statute establishing the agency, or any combination of such provisions, for statutory authority to adopt the rule."[29] Ecology requires *express legislative authority* to adopt a rule like CAR. There is no such authority in any Washington statute.

Ecology has cited two statutory sources of its authority to promulgate CAR: (1) RCW 70.235 (state GHG emission reduction targets); and (2) RCW 70.94 (state Clean Air Act ("WA CAA" or the "Act")).[30] Neither statute authorizes Ecology to establish a new GHG emission regulatory program.

RCW 70.235 grants Ecology authority only to "*submit a greenhouse gas reduction plan for review and approval to the legislature*[.][31] An earlier proposed version of this provision would have expressly given Ecology authority to "*develop and implement a program*" to limit statewide GHG emissions.[32] That language was not adopted in the final version of RCW 70.235.020. The legislature consciously deprived Ecology of the authority to adopt a rule like CAR that would establish a GHG emission reduction program; instead,

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[27] *See* RCW 43.17.010 ("There shall be departments of the state government . . . which shall be charged with the execution, enforcement, and administration of such laws, and invested with such powers and required to perform such duties, *as the legislature may provide*.") (emphasis added); *Fahn v. Cowlitz Cty.*, 93 Wash. 2d 368, 374, 610 P.2d 857 (1980) (An "administrative agency is limited to the powers and authority *granted to it by the legislature*.") (emphasis added) (citing *Water Power Co. v. State Human Rights Comm'n*, 91 Wash. 2d 62, 65, 586 P.2d 1149 (1978); *Cole v. State Util. & Transp. Comm'n*, 79 Wash. 2d 302, 485 P.2d 71 (1971)).

[28] RCW 34.05.570(2)(c).

[29] RCW 43.21A.080.

[30] *See* Proposed rule CR-102, Wash. State Register ("WSR") 16-12-098 (May 31, 2016).

[31] RCW 70.235.020(1)(b) (emphasis added). This plan must "describ[e] those actions necessary to achieve the [statutory state emission reduction targets][.]" The statute further requires Ecology to (i) develop and implement a system for monitoring and reporting GHG emissions; and (ii) track and report on progress toward meeting the emission reduction goals from both current and future policies. RCW 70.235.020(1)(d). None of these statutory mandates authorizes Ecology to establish a program to reduce GHG emissions.

[32] H.B. 2815, 60th Legislature § 3(1)(a) (2008) ("The department shall *develop and implement a program* to limit greenhouse gases emissions to achieve the following emissions reductions for Washington state[.]") (emphasis added).

all the legislature granted to Ecology was the authority to submit GHG reduction plans to the legislature for review and approval.[33]

RCW 70.94 does not give Ecology authority to develop and implement a GHG emission reduction trading program based on ERUs. As discussed below in Section 5, Part V(i), Ecology has no authority under the WA CAA to create the ERU, which would represent a new class of emissions credit under the Act. Even if Ecology may have general legal authority to adopt CAR, Ecology has no authority to regulate *non-emitting sources* like LDCs under CAR. As discussed in the following section, RCW 70.94 authorizes Ecology to adopt "emission standards" only for *emitting sources*.

ii. CAR violates the Washington Administrative Procedure Act and Clean Air Act by imposing emission standards on *non-emitting* sources

CAR's emission standards as applied to LDCs violate the APA and WA CAA because they exceed the scope of Ecology's authority under the WA CAA. Ecology lacks statutory authority to impose limitations or constraints on non-emitting sources. Yet, the proposed CAR does precisely this by setting emission standards for LDCs based on *indirect* emissions associated with the end-use of products LDCs sell to third parties.[34] While the rule (rightly) provides that LDCs are not accountable for emissions from natural gas sold to other covered parties, like large electric power generators and large industrial facilities, the rule holds LDCs accountable for emissions from natural gas sold to non-covered parties, such as homes, businesses, and small electric power generators and small industrial facilities.[35] Ecology seeks to make emissions from *non-covered* parties part of the rule's *covered* emissions. This would make *non-emitting* parties bear the compliance burden for emissions *they did not emit*. Ecology has no authority to do this.

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[33] Ecology did submit such a plan in December 2008, recommending that Washington participate in a regional cap-and-trade program as part of the Western Climate Initiative. The 2009 legislature did not enact the proposal. *See* Ecology and CTED, *Growing Washington's Economy in a Carbon-Constrained World: A Comprehensive Plan to Address the Challenges and Opportunities of Climate Change* (Dec. 2008), *available at* http://www.ecy.wa.gov/climatechange/2008CompPlan.htm ("December 2008 Plan"). In late 2014, Governor Inslee proposed the "Carbon Pollution Accountability Act." *See* Washington Governor Jay Inslee, 2015 Carbon Pollution Reduction Legislative Proposals, *available at* http://www.governor.wa.gov/issues/issues/energy-and-climate/2015-carbon-pollution-reduction-legislative-proposals. Among other things, the act would have charged emitters for carbon pollution and created a centralized market for trading emissions credits. The 2015 legislature did not enact the proposal. *See* Washington State Legislature, S.B. 5283/H.B. 1314, *available at* http://app.leg.wa.gov/billinfo/summary.aspx?bill=5283&year=2015. In response to legislative inaction, Governor Inslee issued a directive in July 2015 for Ecology to unilaterally develop a regulatory cap for carbon emissions and develop "substantive emission reductions using existing authority." *See* July 2015 Directive.

[34] *See* Proposed WAC 173-442-020(1)(i)(iii) ("'Covered [LDC] GHG emissions' means CO_2 emissions that result from the complete combustion or oxidation" of covered products, including natural gas and natural gas liquids).

[35] *See* Proposed WAC 173-442-050(2)(a).

Under the WA CAA, Ecology is restricted to setting emission standards for sources that are based on emissions *from those sources*.[36] State court and agency bodies have clarified that emission standards under the Act are based on emissions *from individual sources.*[37] The Act and Ecology's own regulations further establish that the agency can regulate only *emitting* sources: first, the statute defines "source" in terms of "*all of the emissions units* including quantifiable fugitive emissions[.]"[38] Ecology's regulations, in turn, define "emissions unit" as "any part of a stationary source [i.e., "any building, structure, facility, or installation that *emits or may emit* any air contaminant"[39]] or source *which emits or would have the potential to emit* any [regulated] pollutant[.]"[40] Other provisions of the WA CAA show that the legislature intended to target *emitting* sources.[41] Likewise, Ecology's own regulations show that the agency views its authority as limited to regulating *emitting* sources.[42] Because LDCs themselves do not "emit or have the potential to emit" the CO_2

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[36] Section 94.331 of the WA CAA orders Ecology to adopt "emission standards" to control or prohibit certain emissions. Ecology can base these emission standards "upon a system of classification by types of emissions or types of sources of emissions, or combinations thereof[.]" RCW 70.94.331(2)(c). This language implies that "sources" and "emissions" are linked (i.e., that Ecology can regulate in terms of either *emissions (from sources)* or *sources (of emissions)*). It does not give Ecology authority to regulate beyond a "source" (i.e., to regulate emissions on their own, without regard for the source of those emissions). The statute further defines "emission standard" as "a requirement established under [the federal or WA CAA] that limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance *of a source* to assure continuous emissions reduction, and any design, equipment, work practice, or operational standard adopted under the [the federal or WA CAA]." RCW 70.94.030(12) (emphasis added).

[37] *See In the Matter of Kaiser Aluminum & Chem. Corp., Tacoma v. Puget Sound Air Pollution Control Agency*, PCHB No. 85-172, 1986 WL 26557, at *3 (Wash. Pol. Control. Bd. Jan. 23, 1986) (characterizing emission standards as "those limitations achievable by existing technology which can be imposed on releases of contaminants *from individual sources*.") (emphasis added); *see also ASARCO, Inc. v. Puget Sound Air Pollution Control Agency*, 112 Wash. 2d 314, 320, 771 P.2d 335, 339 (1989) ("[Ecology] . . . must adopt emission standards to control the release of contaminants *from any individual source*.") (emphasis added).

[38] RCW 70.94.030(22) (emphasis added). The emissions units constituting a "source" also must be "located on one or more contiguous or adjacent properties, and [] under the control of the same person, or persons under common control, whose activities are ancillary to the production of a single product or functionally related group of products." *Id.*

[39] RCW 70.94.030(23) (emphasis added).

[40] WAC 173-400-030(29) (emphasis added).

[41] *See, e.g.*, RCW 70.94.011 ("It is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared as equitably as possible among all *sources whose emissions cause air pollution*.") (emphasis added); RCW 70.94.395 ("If [Ecology] finds . . . that the emissions *from a particular type or class of air contaminant source* should be regulated on a statewide basis in the public interest and for the protection of the welfare of the citizens of the state, it may adopt and enforce rules to control and/or prevent the emission of air contaminants *from such source*[.]") (emphasis added); *see also Longview Fibre Co. v. State, Dep't of Ecology*, 89 Wash. App. 627, 633, 949 P.2d 851, 854 (1998) ("RCW 70.94.395 grants [Ecology] authority to adopt and enforce rules to control and/or prevent the emission of air contaminants *from specific sources of air contaminants*.") (emphasis added).

[42] *See, e.g.*, WAC 173-400-010(1) ("It is the policy of [Ecology] . . . to provide for the systematic control of air pollution *from air contaminant sources*[.]") (emphasis added); WAC 173-400-040(1) ("All *sources and emissions units* are required to meet the emission standards of this chapter.") (emphasis added); (WAC 173-400-010(2) ("It is the purpose of this chapter to establish *technically feasible and reasonably attainable*

released from burning natural gas, Ecology cannot set emission standards for LDCs based on these emissions. By doing so, Ecology attempts to expand its regulatory reach *beyond* emitting sources, in order to regulate emissions from uncovered parties. This is outside the scope of Ecology's statutory authority.

Indeed, the WA CAA appears to give Ecology authority to regulate LDC emissions in only two ways. First, Ecology likely can regulate LDCs for their *direct* emissions (e.g., fugitive emissions from pipeline leaks).[43] Direct LDC emissions are limited and represent a very minor percentage of the state's overall GHG emissions. Second, Ecology can require LDCs to *report on* their indirect GHG emissions.[44] However, the statute gives Ecology no authority to *impose an emission standard or emission limitation* on LDCs for these indirect emissions.

Furthermore, to the extent CAR regulates end-use emissions from natural gas sales, CAR regulates the *sale of commodity* (i.e., natural gas) and not emissions. LDCs emit nothing by selling natural gas to customers. Thus, CAR, as applied to LDCs, is not an "emission standard" under the WA CAA. While the WA CAA authorizes several programs to regulate sales of commodities, as opposed to emissions,[45] the Act does not provide any specific statutory grant for natural gas sales. Thus, Ecology has no statutory authority to regulate commodity sales of natural gas.

If Ecology includes LDCs in the final CAR, PSE urges Ecology to set emission baselines and emission reduction requirements for LDCs that are based only on LDCs' direct emissions. Ecology has no statutory authority to regulate LDCs for indirect end-use emissions, or to regulate commodity sales of natural gas. The agency cannot hold LDCs accountable for what they do not emit.

iii. Ecology violated the Washington State Environmental Policy Act by failing to adequately consider whether CAR has *any* probable significant adverse environmental impacts

Washington's State Environmental Policy Act ("SEPA")[46] requires state agencies to identify and evaluate possible environmental impacts resulting from major government

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standards and to establish rules generally applicable to the control and/or prevention of the emission of air contaminants.") (emphasis added). (If LDCs can only comply with CAR by purchasing ERUs from other entities, the standards arguably are not "technically feasible" or "reasonably attainable." Indeed, it is difficult to imagine how an emission standard imposed on a non-emitting source ever could be "technically feasible" or "reasonably attainable" for that source.)

[43] *See* RCW 70.94.030(22).

[44] *See* RCW 70.94.151(5)(a).

[45] *See, e.g.*, RCW 70.94.460 (ban on sale of dirty woodstoves); RCW 70.94.980 (ban on sale of certain ozone depleting substances); and RCW 70.94.531 (commute trip reduction plans).

[46] RCW 43.21C; *see* WAC 197-11-020, -904, -918.

actions, including significant new rulemakings like CAR.[47] The purpose of SEPA review is to ensure that agencies fully disclose and carefully consider a proposal's environmental impacts *before* adopting it and "at the earliest possible stage."[48] Under SEPA review, an agency must make a "threshold determination" of whether the proposal will have a "probable significant adverse environmental impact:"[49]

- If the agency determines that a proposed action has a "probable significant, adverse environmental impact," the agency will issue a determination of significance ("DS"). If the agency issues an DS, it must prepare an environmental impact statement ("EIS").[50]

- If the agency determines that a proposed action will have "no probable significant adverse environmental impacts," the agency will issue a determination of non-significance ("DNS").[51]

The agency must base the threshold determination on all "information [that is] reasonably sufficient to evaluate the environmental impact of a proposal."[52] In general, the threshold for issuing a DS and triggering the EIS requirement is low.[53] Importantly, the test is not "whether the beneficial aspects of a proposal outweigh its adverse impacts, but rather . . . whether a proposal has *any probable significant adverse environmental impacts*."[54] Nonetheless, Ecology determined that adopting CAR did not require an EIS and issued a DNS.[55] Ecology's DNS is legally and factually deficient because the agency failed to adequately consider several significant possible adverse environmental impacts from CAR:

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[47] WAC 197-11-704(2)(b)(i) (covered SEPA actions include "adoption or amendment of . . . rules, or regulations that contain standards controlling use or modification of the environment"). Ecology concedes that CAR requires SEPA review.

[48] *See King Cnty. v. Wash. State Boundary Review Bd. for King Cnty.,* 122 Wash. 2d 648, 663-64, 666, 860 P.2d 1024 (1993).

[49] WAC 197-11-310. An agency must conduct a preliminary environmental analysis, in the form of an environmental checklist, before making a threshold determination. WAC 197-11-315. The agency must tailor the checklist's "scope and level of detail of environmental review" to the proposal. WAC 197-11-228(2)(a).

[50] RCW 43.21C.031(1); RCW 43.21C.030(2)(c).

[51] WAC 197-11-340(1).

[52] WAC 197-11-335.

[53] *See King County,* 122 Wash. 2d at 663-64("[A]n EIS should be prepared when significant adverse impacts on the environment are 'probable', not when they are 'inevitable'") (internal quotations omitted).

[54] WAC 197-11-330(5) (emphasis added); *see Seeds, Inc. v. State of Washington*, 98 Wash. App. 1022, 1999 WL 1116820, at *5 ("[P]roposals designed to improve the environment, such as . . . pollution control requirements, may also have significant adverse environmental impacts.") (quoting WAC 197-11-330(5)).

[55] Ecology based this decision on "review of a completed environmental checklist and other information on file with [Ecology.]" Ecology, SEPA Determination of Nonsignificance (May 31, 2016), *available at* http://www.ecy.wa.gov/programs/air/rules/docs/173442SEPAdns-2.pdf.

- **CAR will increase regional net emissions from the electric power sector**. Because CAR will impose significant new costs on fossil generating sources in Washington, these sources will move down in the regional dispatch order compared to fossil generating sources located in states with no carbon constraints. This will result in higher regional emissions.[56] Further, CAR likely will prolong the life and increase utilization of coal-fired units in other states like Montana and Wyoming, as such units will displace more efficient, lower-emitting natural gas combined cycle ("NGCC") turbines in Washington. If CAR increases coal-fired generation in other states, GHG emissions, as well as emissions of other conventional pollutants, will increase in those states (with potential environmental justice impacts). Ecology cannot ignore these out-of-state impacts. Indeed, GHG emission increases *anywhere* will have impacts inside of Washington's borders.[57]

- **CAR will drive fuel substitution and increase in-state emissions**. LDCs will need to raise their rates, potentially by a significant amount, to cover the cost of purchasing ERUs to comply with CAR. Those increased costs will drive fuel substitution by LDC gas customers, including increases in the use of wood and electricity for residential heating. As discussed below in Section 4, Part II(i), this fuel-switching will cause emissions to increase. Wood combustion releases higher levels of fine particulate matter and air toxics than burning natural gas for heating. *Indirect* use of natural gas to produce electricity for heating has a higher carbon footprint and higher emissions of other pollutants than *direct* use of natural gas for heating.

- **CAR will discourage emission reductions in the transportation sector.** Many transportation sector emission reductions are possible because of fuel-shifting from petroleum-based fuels to electricity and natural gas-based fuels. As discussed below in Section 4, Part I(ii) and Part II(i), electric vehicles and compressed natural gas ("CNG") trucks emit fewer GHGs and other conventional pollutants than gasoline or diesel-fueled vehicles. CAR will cause electricity and natural gas rates to go up. As a result, customers will be less likely to invest in certain emission reductions activities in the transportation sector—by far the largest source of in-state GHG emissions.[58]

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[56] *See* Figure 2 (Reproduced as Appendix E); *see also* Appendix F ("CO_2 Offset Price Scenarios").

[57] The causes of climate change are not confined to state boundaries. *See Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 868 (9th Cir. 2012) (explaining that "global warming has been occurring for hundreds of years and is the result of a vast multitude of emitters worldwide whose emissions mix quickly, stay in the atmosphere for centuries, and, as a result, are undifferentiated in the global atmosphere"). States have a protectable interest in GHG emitted beyond their state boundaries, because such emissions cause injuries within the state. *See Massachusetts v. EPA*, 549 U.S. 497, 519-21 (2007) (recognizing Massachusetts's injuries caused from global GHG emissions and upholding its standing to sue the EPA for a failure to regulate CO_2 emissions from cars in all states); *Am. Elec. Power Co., Inc. v. Connecticut*, 564 U.S. 410 (2011) (upholding eight states' standing to sue based on injuries caused by GHG emissions in 20 states).

[58] *See* Figure 7 (Reproduced as Appendix T).

- **CAR will artificially drive very expensive energy development projects in Washington at a pace and scale that may not be achievable given costs and siting challenges.** As discussed below in Section 3, Part II, there likely will not be enough ERUs on the market for covered parties to comply with CAR.[59] This will artificially increase the cost of new renewable energy projects in Washington that will be needed to generate surplus RECs that can be converted into ERUs for CAR compliance, even at the exorbitant cost of $107/ERU.[60] SEPA requires Ecology to address the probable impacts of *any future project* that would result from a non-project action like CAR.[61]

By failing to consider these possible adverse environmental impacts, Ecology lacked a sound basis for concluding that adopting CAR does not require an EIS. Ecology thus violated its duty to engage in a robust threshold determination process under SEPA.[62] PSE urges Ecology to undertake a revised SEPA review and make a new threshold determination—and, if necessary, perform an EIS—*before* finalizing this sweeping, far-reaching rule.[63]

II. CAR VIOLATES THE DORMANT COMMERCE CLAUSE OF THE U.S. CONSTITUTION

The dormant commerce clause is inferred from Article 1 of the U.S. Constitution.[64] Under the doctrine, state regulations generally are unconstitutional if they (1) discriminate against interstate commerce; (2) regulate extraterritorially; or (3) unduly burden interstate commerce. If a regulation discriminates or regulates extraterritorially, a court will apply the strict scrutiny test and is "virtually"[65] certain to strike down the law. If a regulation does not discriminate or regulate extraterritorially, but "regulates even-

[59] Future ERU shortfalls are exacerbated by the fact that the proposed CAR (i) allows only in-state projects and activities to generate offset ERUs (e.g., covered parties cannot invest in established out-of-state projects); (ii) limits the types of in-state projects and activities that can generate offset ERUs (e.g., no in-state forestry projects would qualify); and (iii) limits external allowance purchases over time.

[60] *See* Appendix F ("CO_2 Offset Price Scenarios").

[61] *See Spokane Cnty. v. E. Wash. Growth Mgmt. Hearings Bd.*, 176 Wash. App. 555 (2013); WAC 197-11-060(5)(c)(i), (d). An agency cannot postpone environmental analysis to a later, implementation or project-level proposal stage if the proposal would affect the environment without subsequent implementing action. Richard L. Settle, *The Washington State Environmental Policy Act* §13.01[1], at 13-15 to -16 (1987 & Supp. 2010); *see* WAC 197-11-060(5)(d)(i)-(ii).

[62] *See* WAC 197-11-330.

[63] *See King County*, 122 Wash. 2d at 663-64. Preparing an EIS is unlikely to impose a significant burden on Ecology. An EIS could be readily synthesized with CAR's Cost-Benefit Analysis. Both involve evaluating a proposal's probable impacts and possible alternatives. Ecology could issue an integrated document combining an EIS with the Cost-Benefit analysis.

[64] *See* U.S. Const. art. I, § 8, cl. 3; *Healy v. Beer Inst., Inc.*, 491 U.S. 324, 326 n.1 (1989).

[65] *See City of Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978).

handedly" with only "incidental" effects on interstate commerce, a court will apply the less stringent *Pike* balancing test.[66]

A regulation *discriminates* against interstate commerce if it is motivated by economic protectionism, generally defined as "differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter."[67] A discriminatory regulation will be struck down "unless the discrimination is demonstrably justified by a valid factor unrelated to economic protectionism."[68] A state regulation can discriminate facially, in purpose, or in effect. Facial discrimination "invokes the strictest scrutiny" and "by itself may be a fatal defect, regardless of the State's purpose."[69] The degree of discrimination does not need to be significant.[70] A regulation *regulates extraterritorially* if it "directly controls commerce occurring wholly outside the boundaries of a State."[71] The "critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundary of the state."[72] An extraterritorial regulation is "invalid regardless of whether [its] extraterritorial reach was intended[.]"[73] A regulation *unduly burdens* interstate commerce if its incidental burdens on interstate commerce are "clearly excessive" in relation to its putative local benefits under the *Pike* test.[74]

As proposed, CAR both discriminates against interstate commerce and regulates extraterritorially. At minimum, CAR's impacts unduly burden interstate commerce. Because Ecology cannot show that there is no non-discriminatory alternative to CAR *or* that CAR's burdens on interstate commerce do not outweigh its putative local benefits, the rule would not survive either strict scrutiny or the *Pike* test. To avoid dormant commerce clause issues, PSE urges Ecology to amend the proposed CAR so that the rule (i) does not limit offsets to in-state projects and programs and (ii) does not limit external market allowance purchases over time.

i. CAR discriminates on its face by limiting offsets to in-state projects and programs

The proposed CAR explicitly restricts the activities eligible for generating offset ERUs to *in-state* emission reduction projects and programs. Covered parties can meet their

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[66] *See Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

[67] *Or. Waste Sys. v. Dep't of Envtl. Quality of the State of Or.*, 511 U.S. 93, 99 (1994).

[68] *Wyoming v. Oklahoma*, 502 U.S. 437, 454 (1992) (internal citation omitted).

[69] *Hughes v. Oklahoma*, 441 U.S. 322, 337 (1979) (internal citations omitted).

[70] *See New Energy Co. of Indiana v. Limbach*, 486 U.S. 269, 276 (1988) ("where discrimination is patent . . . neither a widespread advantage to in-state interests nor a widespread disadvantage to out-of-state competitors need be shown").

[71] *Healy*, 491 U.S. at 336.

[72] *Id.* (emphasis added).

[73] *Id*.

[74] *Pike*, 397 U.S. at 142.

GHG emission reduction pathway through a combination of: on-site reductions; external market and registry allowance purchases; and "[o]ffset emissions using an *in-state emission reduction project or program*, including RECs, as allowed by the proposed rule."[75] Ecology does not offer a clear justification for this in-state restriction on eligible offset activities, much less one unrelated to economic protectionism. In fact, Ecology observes that developing in-state emission reduction projects "will benefit the local economy and local populations[.]"[76] Thus, CAR facially discriminates against out-of-state offset sources, such as renewable energy generators, in favor of in-state offset sources.

Ecology "cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy" or other types offset activities.[77] Geographic preference provisions benefit local industries at the expense of out-of-state industries by creating in-state demand for a service and allowing *only in-state entities* to meet that demand, even though out-of-state entities could potentially meet it just as well. Various state agencies and legislatures have withdrawn such restrictions from their renewable energy standards.[78] While CAR is not a renewable energy standard,[79] there is no reason the constitutional objections to geographic preference provisions should apply only to renewable energy projects. CAR violates the dormant commerce clause to the extent it expresses a preference for *any type* of in-state offset activity over the same or similar type of out-of-state activity (whether involving energy, transportation, livestock, or other

[75] Cost-Benefit Analysis at 13 (emphasis added). *See also* Proposed WAC 173-442-100(2) ("ERUs must originate from GHG emissions reductions occurring *within Washington* unless derived [from external market allowance purchases].") (emphasis added); Proposed WAC 173-442-160(5) ("Energy efficiency measures and demand side management of electricity and natural gas consumption *in Washington*, and alternative energy generation technologies *located in Washington* may generate ERUs.") (emphasis added).

[76] Cost-Benefit Analysis at 51.

[77] *See Illinois Commerce Comm'n v. FERC*, 721 F.3d 764, 776 (7th Cir. 2013) (stating in dicta that "Michigan's first argument—that its law forbids it to credit wind power from out of state against the state's required use of renewable energy by its utilities—trips over an insurmountable constitutional objection [under the dormant commerce clause].").

[78] *See, e.g.*, *State, ex rel. Missouri Energy Dev. Ass'n v. Pub. Serv. Comm'n*, 386 S.W.3d 165 (Mo. Ct. App. 2012) (dismissing as moot dormant commerce clause challenge to "geographic sourcing" provisions of Missouri Public Service Commission rule because the Commission had withdrawn the provisions after the Joint Committee on Administrative Rules disapproved the provisions); *see also TransCanada Power Marketing Ltd. v. Bowles*, No. 4:10-CV-40070, 2010 WL 4599490 (D. Mass.). In *TransCanada*, an energy company filed a lawsuit alleging that the Massachusetts Green Communities Act of 2008 violated the dormant commerce clause. Initially, the Act required electric distribution companies to enter long-term contracts only with *in-state* renewable energy generators. In 2010, a state agency suspended the geographic limitation and adopted "emergency" regulations allowing for long-term contract proposals from both in-state *and out-of-state* renewable energy generators. In 2012, after the parties agreed to stay the case and enter settlement talks, the state legislature amended the act to remove the in-state requirement. The case was dismissed in 2013. *See* Michael B. Gerrard, *Federalism Obstacles to Advancing Renewable Energy*, 251 N.Y.L.J. 1, 3 (May 8, 2014).

[79] Notably, Washington's renewable portfolio standard ("RPS") under the EIA does not prohibit out-of-state renewable energy sources from being eligible to generate RECs. (However, Washington's RPS does generally restrict eligible REC-generating sources to those in the Pacific Northwest). *See* RCW 19.285.030(12).

measures), without adequately justifying such "differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter."[80]

ii. CAR discriminates on its face by limiting imports of allowances over time (for no reason other than to stop wealth transfers out-of-state)

The proposed CAR limits how covered parties can use allowances from external carbon markets and registries over time.[81] Specifically, the rule sets a declining "cap" on the percentage of a covered party's compliance burden that the party can meet using external allowances.[82] Ecology expressly acknowledges that the purpose of these limits is to "encourag[e] covered parties to obtain ERUs *from Washington State*"—a motive clearly related to economic protectionism.[83] Thus, CAR facially discriminates against out-of-state allowance suppliers in favor of in-state ERU suppliers.

Importantly, Ecology does not propose to limit external allowance use because of concerns about compatibility/equivalency between in-state and out-of-state compliance instruments.[84] Rather, Ecology's aim is to block out-of-state wealth transfers: in other words, to keep money from flowing outside of Washington as covered parties comply with CAR.[85] Ecology cannot restrict out-of-state purchases in order to keep wealth in-state.[86]

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[80] *See Or. Waste Sys.*, 511 U.S. at 99.

[81] *See* Proposed WAC 173-442-170(2)(a).

[82] While covered parties can meet 100 percent of their compliance burden with external allowances during the first two compliance periods, the percentage limit drops to: 50 percent for 2023-2025; 25 percent for 2026-2028; 15 percent for 2029-2031; 10 percent for 2032-2034; and 5 percent for 2035 and beyond. *Id.*

[83] *See* Ecology, SEPA Environmental Checklist — Clean Air Rule at 16 ("SEPA Checklist") (emphasis added).

[84] If that were the case, Ecology could not justify allowing covered parties to use out-of-state allowances to meet 100 percent of their compliance obligation during CAR's first two compliance periods.

[85] See Cost-Benefit Analysis at 29 (noting that "[m]arket-based purchases of emissions allowances from external carbon markets would be *transfers out of the state*. These compliance costs would not likely be mitigated by positive economic activity in other sectors of the state economy.") (emphasis added). As Ecology recognizes, the cheapest compliance option for covered parties often will be out-of-state allowance purchases, and not in-state investments in generation facilities or new offset projects. *See id* at 22-23.

[86] *See Wyoming*, 502 U.S. at 437 (holding that Oklahoma law requiring in-state coal plants to purchase at least 10 percent of their coal from in-state suppliers violated the dormant commerce clause). CAR's declining percentage "caps" on external allowances work in a similar way to the unconstitutional provisions in *Wyoming*. For example, by restricting external allowances to 5 percent of a covered party's compliance burden after 2035, CAR essentially mandates that certain covered parties—in particular, those such as LDCs which have virtually no viable way to comply other than purchasing ERUs from either in-state or out-of-state sources—obtain 95 percent of their ERUs from in-state suppliers. *See also Middle S. Energy, Inc. v. Arkansas Pub. Serv. Comm'n*, 772 F.2d 404 (8th Cir. 1985) (holding that action by Arkansas Public Service Commission that would prohibit an Arkansas utility from purchasing out-of-state energy violated the dormant commerce clause).

iii. CAR discriminates and regulates extraterritorially by restricting ERUs to an in-state market and allowing for only "one-way linkage" to external carbon markets

CAR explicitly prohibits "third parties" from acquiring ERUs.[87] The category of "third parties" inherently includes all out-of-state entities (because CAR covers only Washington entities). Effectively, then, CAR restricts ERUs to an in-state market: ERUs cannot flow outside of Washington. At the same time, CAR would allow in-state covered parties to purchase allowances from certain external carbon markets and registries.[88] Such a scenario would create, in Ecology's own words, a "one-way linkage" between CAR's market and approved external markets.[89]

Restricting ERUs to an in-state market facially discriminates against interstate commerce. At minimum, it discriminates in effect. In general, a state regulation cannot ban in-state entities from exporting goods and other products generated in the state to other states.[90] "[O]ur economic unit is the Nation," and once something "becomes an article of commerce . . . its use cannot be limited to the citizens of one State to the exclusion of citizens of another State."[91]

The structure of CAR's trading market also amounts to extraterritorial regulation, to the extent its "one-way linkage" could increase allowance prices in external markets and hurt the market position of out-of-state entities relative to Washington entities.[92] Indeed, CAR is likely to have the practical effect of raising allowance prices in external markets like CARB. If "one-way linkage" between the CAR and CARB programs occurs, CAR will add new

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[87] *See* Proposed WAC 173-442-140(3)(a) ("[T]hird parties may only facilitate, broker, or assist covered parties to transfer ERUs recorded in accounts in the registry."); Proposed WAC 173-442-140(3)(b) ("Third parties may not own ERUs.").

[88] *See* Proposed WAC 173-442-110(3); Proposed WAC 173-442-170.

[89] *See* Cost-Benefit Analysis at 50 (CAR "provides the possibility for *one-way linkage* to existing systems . . . [and] is not able to establish an allowance system, which would be required for full linkage between this program and cap-and-trade programs.") (emphasis added).

[90] *See, e.g.*, *New England Power Co. v. New Hampshire*, 455 U.S. 331 (1982) (holding that New Hampshire law prohibiting a utility from exporting hydropower generated within the state to another state violated the dormant commerce clause); *Hughes*, 441 U.S. at 322 (holding that Oklahoma statute forbidding transportation of minnows out-of-state for sale, without limiting how minnows could be disposed of within the state, violated the dormant commerce clause); *West v. Kansas Natural Gas Co.*, 221 U.S. 229 (1911) (holding that Oklahoma law prohibiting corporations from transporting natural gas produced within the state to other states violated the commerce clause).

[91] *Hughes*, 441 U.S. at 339 (internal citations and quotations omitted).

[92] While the Ninth Circuit appears to view the extraterritoriality doctrine as limited to "price affirmation" statutes, *see Ass'n des Eleveurs de Canards et d'Oies du Quebec v. Harris*, 729 F.3d 937, 951 (9th Cir. 2013) (internal quotations omitted), such a "categorical approach to the Commerce Clause would be contrary to well-established Supreme Court jurisprudence." *See North Dakota v. Heydinger*, No. 14-2156, 2016 WL 3343639, at *6 (8th Cir. June 15, 2016) (citing *W. Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 201 (1994) ("Our Commerce Clause jurisprudence is not so rigid as to be controlled by the form by which a State erects barriers to commerce.")).

participants to the CARB market and increase demand for CARB's limited pool of allowances, without increasing the supply of allowances in that market. The net effect of increasing demand without increasing supply will be to raise the price of CARB allowances. This would control some conduct occurring entirely outside of Washington's borders (e.g., allowance sales between two CARB-covered parties in California) and potentially harm the market position of California entities relative to Washington entities when those entities compete in the same markets. For instance, CARB covers certain industries in California that CAR would not cover (or would exempt, such as EITE industries for at least the initial compliance period) in Washington. If CAR raised CARB allowance prices, this would increase the compliance burden for *all* California CARB-covered parties without increasing the compliance burden of *all* equivalent Washington CAR-covered parties competing in the same markets. Such an outcome would give Washington industries an advantage over their competitors in California. Under the dormant commerce clause, "[s]tates may not deprive businesses and consumers in other States of whatever competitive advantages they may possess based on the conditions of the local market."[93] It does not matter that Ecology may not intend this result.[94]

iv. Other states could not adopt rules like CAR without extraterritorial impacts

In determining if a regulation regulates extraterritorially, "the practical effect of the [regulation] must be evaluated not only by considering the consequences of the [regulation] itself, *but also by considering* how the challenged [regulation] may interact with the legitimate regulatory regimes of other States and *what effect would arise if not one, but many or every, State adopted [a] similar [regulation]*."[95] As described above, the proposed CAR regulates on a statewide basis and would enable a statewide trading market (with "one-way linkage" to external markets). Yet, the rule covers sectors, including the electric power and LDC sectors,[96] that are *inherently interstate*. As a result, CAR attempts to regulate systems at a state level that should only be regulated at a national level.[97] Because other states could not adopt similar rules without extraterritorial impacts, CAR amounts to extraterritorial regulation.

Indeed, if other states adopted rules like CAR, regulations in one state or group of states could impact local conditions and policies in another state. For example, many utilities, like PSE, own electric generating sources in multiple states. Assume a Utility owns

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[93] *Healy*, 491 U.S. at 339 (internal citations and quotations omitted).

[94] *Id.* at 336.

[95] *Id.* (emphasis added).

[96] Even *intrastate* natural gas distribution pipelines often connect to *interstate* transmission pipelines and carry and deliver natural gas that was produced in, and transported from, other states.

[97] As the U.S. Supreme Court has noted, "the production and transmission of energy is an activity particularly likely to affect more than one State, and its effect on interstate commerce is often significant enough that uncontrolled regulation by the States can patently interfere with broader national interests." *Arkansas Elec. Coop. Corp. v. Arkansas Pub. Serv. Comm'n*, 461 U.S. 375, 377 (1983) (internal citations omitted).

fossil sources in States X, Y, and Z. If States X and Y adopt a CAR-like rule, but State Z does not, the Utility would be incentivized to shut down or reduce operations of its fossil sources in States X and Y and run its fossil sources in State Z *as much and as long as possible*.[98] If other utilities in the region follow suit, then fossil fuel-fired generation would become concentrated in State Z. This likely would make it harder for State Z to comply with certain federal environmental regulations, such as the National Ambient Air Quality Standards ("NAAQS") or the Clean Power Plan ("CPP"). As a result, State Z might ultimately decide to adopt its own GHG emissions regulation—something it would not have been prompted to do *but for* the impact within its borders of regulations in other states. No state has the "power to project its legislation into [another state]."[99] It does not matter whether States X and Y sought this result in State Z.[100]

In addition, compliance instruments (e.g., allowances or credits) would not necessarily be interchangeable between the State X, Y, and Z trading markets. Indeed, that is necessarily the case if each state adopted a rule like CAR, which would allow only *in-state* entities to acquire its compliance instruments and only *in-state* projects to generate offset credits. The Utility would have to figure out *how* or even *if* it could buy, sell, or trade compliance instruments across state borders—even among covered sources all owned by the Utility —and record those transactions. These regulatory burdens would discourage or even prevent the interstate flow of compliance instruments, "creat[ing] just the kind of competing and interlocking local economic regulation that the Commerce Clause was meant to preclude."[101] Such "economic Balkanization"[102] among state carbon trading markets—each operating in isolation or semi-isolation—would violate the dormant commerce clause and undermine the efficiency that a uniform national trading market could provide.

v. Ecology cannot show that there are no non-discriminatory alternatives to CAR, or that its incidental burdens on interstate commerce do not outweigh its putative local benefits

Because CAR discriminates against interstate commerce and regulates extraterritorially, it will trigger strict scrutiny. Under strict scrutiny, a regulation is *per se* invalid, unless the state can show both (i) a legitimate local purpose and (ii) that there is no non-discriminatory alternative "adequate to preserve the local interests at stake."[103] PSE

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[98] As discussed below in Section 3, Part I(i), CAR will incentivize Washington utilities to import power from higher-emitting units in other states, lowering emissions in Washington while increasing emissions in the region. CAR-like rules in other states would have a similar effect.

[99] *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 521 (1935).

[100] *See Healy*, 491 U.S. at 336.

[101] *Id.* at 337.

[102] *See Hughes*, 441 U.S. at 325.

[103] *Hunt v. Washington State Apple Adver. Comm'n*, 432 U.S. 333, 353 (1977).

does not dispute that addressing climate change is a legitimate local purpose.[104] However, Ecology cannot show that there is no non-discriminatory alternative to CAR for achieving this purpose. Indeed, Ecology considered a wide range of alternatives in developing CAR. Many of these would be less burdensome than CAR while achieving the same, if not greater, local benefits, including (i) linking the Washington program directly to existing market programs; and (ii) excluding natural gas as a covered emissions category.[105] Further, Ecology also can continue to work to get the Washington state legislature to adopt a comprehensive cap-and-trade program[106] or another tool for regulating GHG emissions, like a carbon tax. Additionally, Ecology can rely on Washington's state plan under the CPP for regulating GHG emissions from the state's electric power sector. Because adequate non-discriminatory alternatives exist, CAR would not survive strict scrutiny.

Even if CAR is found not to discriminate against interstate commerce or regulate extraterritorially, the rule's "incidental burdens" on interstate commerce would subject it to the *Pike* balancing test.[107] CAR's burdens on interstate commerce are "clearly excessive" in relation to its putative local benefits. CAR would impose significant costs on Washington businesses and consumers, without achieving any real climate benefits. Indeed, Ecology acknowledges that "it is not possible to specify the local benefits to climate change resulting from control of local emissions."[108] Further, as discussed below in Section 3, Part I(i), CAR would *increase*, not decrease, net GHG emissions on a regional basis—undercutting any potential local benefits from lowered in-state GHG emissions. This means CAR's only tangible local benefits would come from reduced in-state emissions of conventional pollutants (such as nitrogen oxides or fine particulates), as a side-effect or "co-benefit" of lowered GHG emissions. Yet, Ecology acknowledges that "some projects to reduce GHGs may result in the *increase* of conventional pollutants."[109] These projects could cause other local harms as well, such as increases in wastewater discharges and new noises and odors.[110] Given CAR's significant burdens and uncertain (at best) and illusory (at worst) local benefits, the rule would not survive scrutiny under the *Pike* test.

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[104] PSE acknowledges that climate change is real and recognizes the need for carbon regulation. However, PSE believes climate change should be addressed on a national, and not state-wide, basis.

[105] *See* Cost-Benefit Analysis at 49-51.

[106] *See, e.g.*, December 2008 Plan.

[107] *See Pike*, 397 U.S. at 142.

[108] Cost-Benefit Analysis at 36.

[109] SEPA Checklist at 9.

[110] *Id.*

Section 3: Implementation Comments

I. CAR WILL HAVE UNINTENDED CONSEQUENCES BECAUSE IT IS A STATE-CONSTRAINED RULE REGULATING INHERENTLY INTERSTATE AND INTERNATIONAL ACTIVITIES

The proposed CAR is a state-constrained rule: Ecology has no authority to impose restrictions on, or otherwise regulate, activities occurring beyond Washington's borders. At the same time, the rule targets industries, like the electric power and LDC sectors, that are inherently *interstate and international* in character. For instance, Washington's electric grid is part of the Western Interconnection, a large regional interconnection that stretches from western Canada down to northern Mexico and extends eastward across many of the Great Plains states.[111] All electric utilities in the Western Interconnection are linked during normal system conditions and operate at a synchronized frequency (60 Hertz). The system comprises a wide range of electric generating sources, including hydroelectric sources, natural gas power plants (which vary in efficiency), coal power plants, and an increasing number of wind and solar facilities.

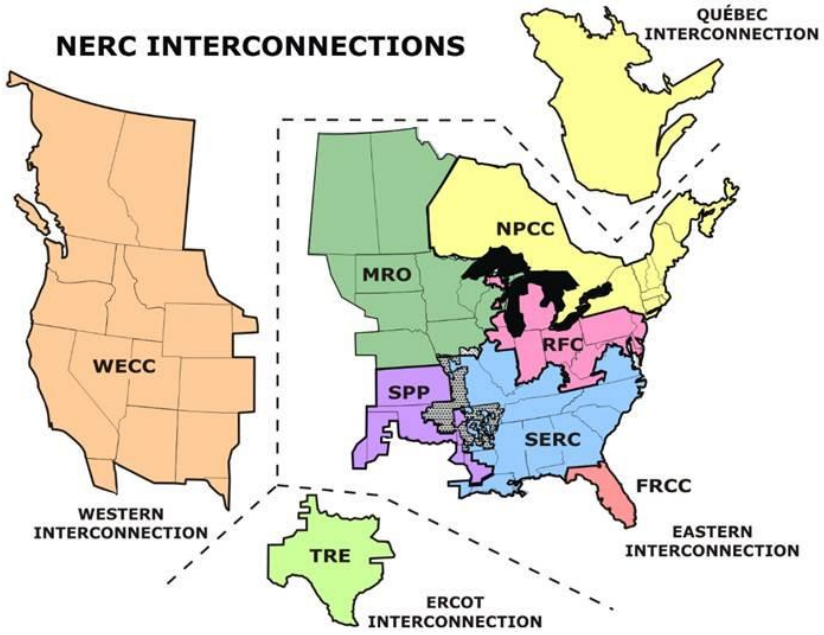

Figure 1.[112] Figure 1 demonstrates the interstate and international nature of North American electric grid systems, including the broad geographic range of the Western Interconnection.

[111] *See* Figure 1 (Reproduced as Appendix A); *see also* Appendix B ("Western Interconnection Map"). The Western Electricity Coordinating Council ("WECC") is the regional entity in charge of promoting system reliability, as well as compliance monitoring and enforcement, throughout the Western Interconnection.

[112] North American Electric Reliability Corporation ("NERC"), NERC Interconnections, *available at* http://www.nerc.com/AboutNERC/keyplayers/Documents/NERC_Interconnections_Color_072512.jpg.

i. CAR will *increase* regional electric power sector GHG emissions

The electric generating sources within the vast Western Interconnection region are coordinated to enable local electric utilities to provide least-cost electricity to their customers. Critically, state laws *obligate* local electric utilities to provide this least-cost service.[113] As a result, a utility will respond to higher generating costs (e.g., those caused by a carbon constraint like a GHG emission limit) at one or more electric generating sources in a predictable way: by drawing upon *other, unaffected* sources to displace the now-higher cost electricity from the affected source(s).

Thus, CAR would have profound reverberating effects throughout the Western Interconnection. If CAR imposes emission reduction requirements on natural gas generators in Washington, the cost of electricity generated from those sources will increase. Accordingly, Washington utilities will be obligated to run those in-state sources *less* and, in exchange, import *more* electricity from sources in neighboring states to make up the lost generation. These out-of-state generating sources predominantly will be natural gas- and coal-fired power plants.

Such generation-shifting is virtually certain to result in higher net regional emissions. Washington has one of the strictest emission performance standards ("EPSs") in the country.[114] Washington's GHG emission rate for electricity is less than half that of nearby states such as Montana, Wyoming, and Utah[115]—states which currently lack any state-based plans to impose carbon constraints. Electricity generated outside of Washington thus is nearly certain to be higher-emitting than electricity generated in Washington. If CAR regulates the electric power sector, the rule would increase the costs of running Washington's highly efficient natural gas generators. This would incentivize Washington utilities to displace lower-emitting in-state generation with higher-emitting out-of-state generation. While emissions may decrease *within Washington state*, emissions would increase *across the Western Interconnection*.[116]

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[113] In Washington, "[e]ach [regulated] electric utility . . . has the responsibility to meet its system demand with *a least cost mix* of energy supply resources and conservation." WAC 480-100-238(1) (emphasis added).

[114] *See* Appendix C ("Current State GHG Emission Performance Standards"). Washington's current EPS is 970 lbs of GHGs per Megawatt-hour ("MWh") for all baseload electric generation for which electric utilities enter into long-term financial commitments. *See* WAC 194-26-020; RCW 80.80.040-50. Notably, Washington's EPS already is *less than* the CO_2 emission standard of 1,000 lbs CO_2 per MWh that EPA finalized under Section 111(b) of the federal Clean Air Act for newly constructed and reconstructed baseload natural gas units. *See* EPA, *Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units*, 80 Fed. Reg. 64,510, 64,512-13 (Oct. 23, 2015).

[115] *See* Appendix D ("State Emission Rates").

[116] *See* Figure 2 (Reproduced as Appendix E); *see also* Appendix F ("CO_2 Offset Price Scenarios").

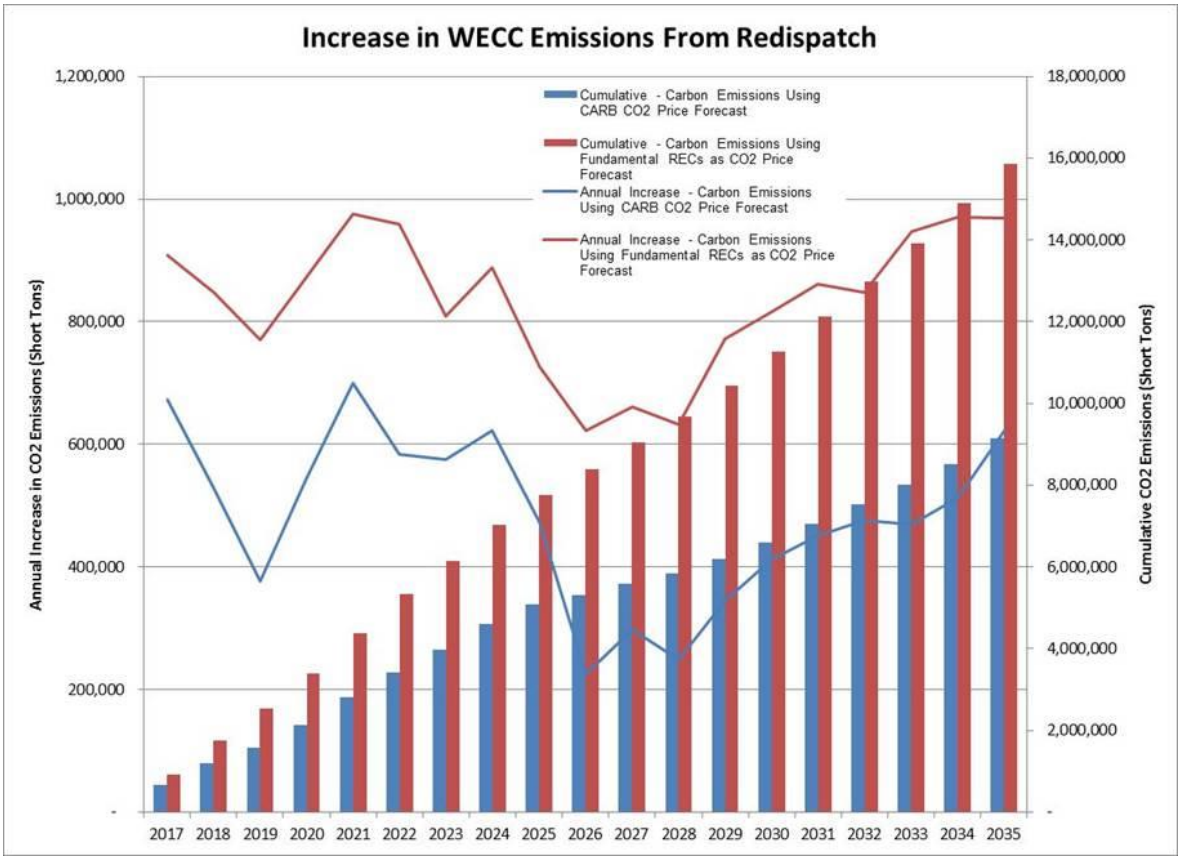

Figure 2.[117] Figure 2 depicts how much CAR will cause regional GHG emissions to increase, depending on ERU costs. It demonstrates projected *annual* and *cumulative* emissions increases throughout the Western Interconnection. The left axis and red and blue lines reflect the *annual regional emissions increases* CAR would cause, depending on the cost of ERUs. The red line reflects the annual emissions increase if the cost of an ERU is based on the cost of a REC as a result of constructing new renewable energy resources (i.e., $107/ERU). The blue line reflects the annual emissions increase if the cost of an ERU is approximately the cost of a CARB allowance (assuming no impact from Washington's increased demand on CARB allowances) (i.e., $14/ERU). (However, as described under Figure 4 below, PSE believes the $14/ERU CARB allowance price is neither realistic nor sustainable.) Based on renewable energy build-out costs, annual regional emissions will increase between 600,000 and 900,000 tons per year. Based on CARB allowance costs, annual regional emissions will increase between 250,000 and 650,000 tons per year. The right axis and red and blue bars reflect the *cumulative emissions increases* CAR would cause, depending on the cost of ERUs.[118] Again, the red bars reflect the emissions increase if ERU costs are based on REC costs from new renewable energy construction. The blue bars reflect the emissions increase if ERU costs are based on CARB allowance costs. CAR will cause cumulative regional emissions to increase between 9 and 16 million tons through 2035. Such increases clearly are counterproductive to CAR's objectives.

[117] Reproduced as Appendix E; *see also* Appendix F ("CO_2 Offset Price Scenarios")

[118] These projections are based on modeling using "Aurora," a widely used forecasting tool in the electric industry. Aurora is used by electric utilities, state and federal regulators and independent system operators to develop generation and pricing forecasts for integrated planning, budgeting and regulatory oversight. *See* Epis, LLC, AURORAxmp, http://epis.com/aurora_xmp/ (last accessed July 20, 2016).

To avoid these emission increases, CAR should exclude the electric power and LDC [119] sectors. At minimum, the final CAR should include an "exemption" provision, along the lines of the one PSE proposes below in Section 5, Part I, to ensure that emission reductions in Washington will not result in greater emission increases elsewhere in the Western Interconnection.

ii. CAR will undermine the federal Clean Power Plan

As a national-level regulation, the federal CPP is superior to CAR for regulating the inherently interstate and international electric power sector. In fact, CAR's flawed incentive structures will work at cross-purposes to CPP goals. Furthermore, CAR does not adequately provide for transitioning the electric power sector from regulation under CAR to regulation under the CPP. At minimum, CAR would complicate and delay Washington's ability to develop an approvable CPP state plan.

First, CAR would discourage or preclude Washington's natural gas generators from running.[120] The CPP, in contrast, encourages natural gas generators to run *more.* EPA recognizes that natural gas is both a cleaner alternative to coal and a key "bridge fuel" to renewable energy resources. Thus, generation-shifting from existing coal units to existing natural gas units is one of the three "building blocks" EPA used in setting state CPP emission rate targets.[121] As the CPP recognizes, Washington's under-utilized natural gas generation fleet, if more fully utilized, could help to wean neighboring states like Montana and Wyoming off of coal power.[122] This would achieve significant regional emission reductions for only a modest in-state emissions increase.

Indeed, Washington's NGCC units would have substantial "headroom" under the CPP to ramp up their generation to help displace or replace retired coal-fired generation (both in Washington and throughout the Western Interconnection). The CPP anticipates running NGCC plants *up to 75 percent* capacity factor.[123] Washington's NGCC units currently run at only *about 15-30 percent* capacity factor (traditionally under-utilized due to an abundance

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[119] Excluding the electric power sector alone will not be enough. If CAR regulates LDCs, natural gas fuel prices will go up. This will increase the costs of operating natural gas generators. To avoid incentivizing generation-shifting from Washington gas sources to out-of-state fossil sources, CAR must exclude *both* the electric power and LDC sectors.

[120] Not only would CAR raise natural gas prices, but CAR would incentivize a utility like PSE—which operates as both an electric power and gas utility—to run its natural gas generators *less* in order to generate ERUs needed to help cover a likely ERU deficit on its LDC side.

[121] *See* EPA, *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, 80 Fed. Reg. 64,662, 64,667 (Oct. 23, 2015) ("CPP").

[122] *See* 80 Fed. Reg. 64,692 (noting interconnected and interstate nature of electric grid); *see also id.* at 64,779 (noting that shifts to low-emitting gas generation "will generally displace higher-emitting generation" and that "[d]isplacement of higher-emitting generation will lower overall CO_2 emissions from the source category of affected [electric generating units]"); *Id.* at 64,800 (noting that "[s]ources can achieve increases in utilization of existing NGCCs that displace generation from steam sources without impacting reliability").

[123] *See id.* at 64,798-99.

of hydropower and cheap coal power in the region).[124] Critically, however, CAR does not recognize the low historic capacity factor values of Washington's NGCC units. CAR also fails to recognize that the state's NGCC units will need to ramp up to meet new load demands when the Centralia units retire (or else this generation will shift out-of-state, likely to higher-emitting units).[125] A similar scenario will arise if any out-of-state fossil units currently supplying power into Washington (e.g., Colstrip Units 1 and 2) retire. Thus, CAR's emission caps would restrict Washington's *already underutilized* gas units from running more to make up for generation shortfalls created by coal plant retirements. This would undercut one of the CPP's key anticipated pathways for cost-effectively and efficiently reducing carbon emissions.

Second, CAR would frustrate the ability to integrate renewable resources into the existing power system. This would undermine the CPP's powerful incentive to develop new renewable energy resources to achieve emissions goals. As Washington increases the amount of intermittent, renewable electricity generation, the amount of flexible, gas-fired generation must also increase to support the grid when renewable energy resources are not available and ensure reliability is maintained. Imposing a declining, mass-based limit on such natural gas generators through CAR will work at cross purposes to renewable energy objectives, potentially constraining renewable development.

Finally, CAR does not adequately provide for the transition to regulating the electric power sector under the CPP. The proposed rule contains only a single, vague provision addressing this transition.[126] This generic provision does not provide sufficient certainty to regulated electric utilities, who apparently must start planning now to (i) comply with CAR for one (or perhaps two or more, depending on if and when EPA approves Washington's state plan) compliance period(s); and (ii) comply with a Washington state CPP plan at some point after 2020.

Given the proposed CAR's structure, this transition is unlikely to be seamless. Indeed, CAR is not set up to be a "trading ready" program under the CPP.[127] For instance, CAR defines ERUs differently than the CPP defines allowances or emission reduction credits ("ERCs"),[128] and it is unlikely that CAR's Ecology-administered registry would

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[124] *See* Appendix G ("Historic Dispatch—Washington State Natural Gas Turbine Fleet").

[125] *See* Figure 8 (Reproduced as Appendix U).

[126] *See* Proposed WAC 173-442-040(3) ("Stationary sources included in the [federal] Clean Power Plan . . . will be considered to comply with the requirements of [CAR] at the beginning of the first compliance period of the Clean Power Plan provided that: (a) EPA has approved Washington's implementation plan; (b) The approved implementation plan requires greater GHG emissions reduction than required under 40 C.F.R. Part 60, Subpart UUUU; and (c) When a unit within a covered party's facility is subject to the Clean Power Plan, then only the GHG emissions from that unit(s) are covered under this subsection.").

[127] *See generally* 80 Fed. Reg. at 64,887-910.

[128] CAR defines an ERU as "one unit equivalent to one metric ton of CO_2e." Proposed WAC 173-442-020(m). The CPP defines an allowance as one short ton of CO_2 emissions, *see* EPA, *Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before Jan. 8, 2014; Model Trading Rules; Amendments to Framework Regulations*, 80 Fed. Reg. 64,966, 65,012, and an ERC as one MWh of zero-carbon generation (or avoided emissions). *See* 80 Fed. Reg. at 64,959.

qualify as "a linked or common tracking system" under the CPP.[129] Further, CAR precludes covered entities from using allowances or ERCs from external CPP trading programs (which will not be "multi-sector" programs) to generate ERUs.[130] Thus, CAR is different enough from any future Washington state CPP plan that the time, effort, and other resources Ecology would expend to regulate the electric power sector under CAR during the interim period before a state plan takes effect would do little to aid CPP compliance (and might even make it harder for Washington to get a CPP state plan approved).

iii. To avoid these unintended consequences, CAR should not regulate the electric power or LDC sectors

Ecology should not regulate the electric power sector under CAR. Instead, Ecology should focus its resources on developing a "trading-ready" program under Washington's CPP state plan. Ecology also should exclude the LDC sector from regulation under CAR because this sector inextricably is linked to the electric power sector. (LDCs provide fuel to natural gas generators; if natural gas prices go up because CAR regulates LDCs, this also could impact electric utility operations). This approach makes the most sense in terms of preserving limited agency resources, providing long-term regulatory certainty to utilities, and achieving *actual* net emission reductions.

At minimum, Ecology should provide covered electric power and LDC sources with (at least) a three-year delay in the start of compliance with CAR—the same benefit Ecology provides to covered EITE parties and petroleum product importers (who will *not* become subject to the CPP).[131] Indeed, it is arbitrary and capricious for Ecology to delay the compliance start date for some covered parties but not others.[132] Even though the U.S. Supreme Court has stayed implementation of the CPP,[133] Washington's electric power sector must continue to plan for compliance. Ecology should delay applying CAR to electric power generators and LDCs until there is clarity around the CPP program and timeline, including the status of Washington's state plan and other state plans within the Western Interconnection. Otherwise, Ecology risks duplicating efforts and working at cross-

[129] *See id.* at 64,839.

[130] *See* Proposed WAC 173-442-170(1)(a).

[131] *See* Proposed WAC 173-442-030(2).

[132] Agency action is arbitrary or capricious "if it is willful and unreasoning and taken without regard to the attending facts or circumstances." *Washington Indep. Tel. Ass'n v. Washington Utilities & Transp. Comm'n*, 148 Wash. 2d 887, 905 (2003). Under the Washington APA, an "arbitrary and capricious" agency rule is invalid. RCW 34.05.570(2)(c). Ecology has offered no reasoned explanation for its differential treatment of covered EITE and non-EITE parties with regards to CAR compliance timing. In particular, Ecology has ignored the "attending facts or circumstances" presented by the CPP. If anything, there is *more* reason to delay the compliance start date for electric power generators and LDCs, given that these sectors need to work with Ecology and other stakeholders between 2017 and 2020 (or later) to develop (and prepare for compliance with) an approvable Washington CPP plan--a plan that would achieve the same objectives as CAR, but more effectively and efficiently.

[133] *See West Virginia v. EPA*, 577 U.S. ---, Order 15A773 (Feb. 9, 2016).

purposes with the intended goal of both CAR and the CPP of achieving real emission reductions.

Should the final CAR regulate the electric power sector until the sector can transition to regulation under the CPP, PSE requests Ecology to state in the final rule that compliance with a CPP *federal* implementation plan also constitutes compliance with CAR. Ecology also should clarify the effect of EPA *partially* approving Washington's state plan.

II. CAR FAILS TO ANALYZE OR PROVIDE NEEDED CERTAINTY OF FUTURE ERU AVAILABILITY AND PRICE

The proposed CAR fails to provide an acceptable level of certainty concerning future ERU markets. Critically, Ecology has provided no analysis of the future supply and demand of ERUs, or of what those ERUs will cost. Promulgating the rule without such an analysis is arbitrary and capricious.[134]

Despite the fact that Ecology appears to assume that sufficient ERUs will be available, PSE's preliminary analyses indicate a very real possibility of an ERU shortfall. PSE has forecasted future electric power and natural gas demand and supply based on its 2015 Integrated Resource Plan.[135] Based on this forecast, PSE projects significant ERU shortfalls for the Company, with a deficit of around 800,000 ERUs beginning in 2017 and increasing throughout the life of the program.[136] An inadequate ERU market—i.e., one without enough ERUs to go around—would lead to (potentially significantly) higher compliance costs than Ecology has projected.

A number of factors contribute to future ERU market uncertainty, including:

(1) Ecology has failed to analyze future ERU market dynamics (including supply, demand, and cost);

(2) Each of the proposed ERU-generating projects and programs has uncertain and limited potential to achieve emission reductions:

- **Surplus RECs:** In general, Ecology's analysis of REC markets in the proposed CAR's Cost-Benefit Analysis is flawed.[137] Washington's REC

[134] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[135] Ecology's CAR proposal, comments, and Cost Benefit Analysis include no information relevant to estimating the future supply or demand for ERUs. In the absence of such critical information, PSE's projected supply/demand balance of ERUs is the best information available to the Company.

[136] *See* Figure 3 (Reproduced as Appendix H).

[137] First, the analysis references irrelevant REC markets (i.e., those in other states). All that matters for CAR is the REC market in Washington. Second, the analysis does not adequately explain certain cost assumptions. For both REC and external market allowance prices, the analysis uses current market prices. *See* Cost-Benefit Analysis at 14-15. Therefore, it does not account for the fact that CAR *itself* will impact supply and demand for RECs and allowances, ultimately driving up prices. For example, CAR will increase demand for new RECs because there are not currently enough RECs available on the market to meet PSE's ERU needs.

market is limited. While PSE currently has some surplus RECs from the Company's "over-compliance" with the Washington EIA, these surplus RECs will run out after 2018 and will be insufficient to meet PSE's future ERU demand under CAR.[138] The costs of generating ERUs through building new wind generation would be extremely high, around $107/ERU[139]—*making RECs one of the most expensive CAR compliance options*.[140]

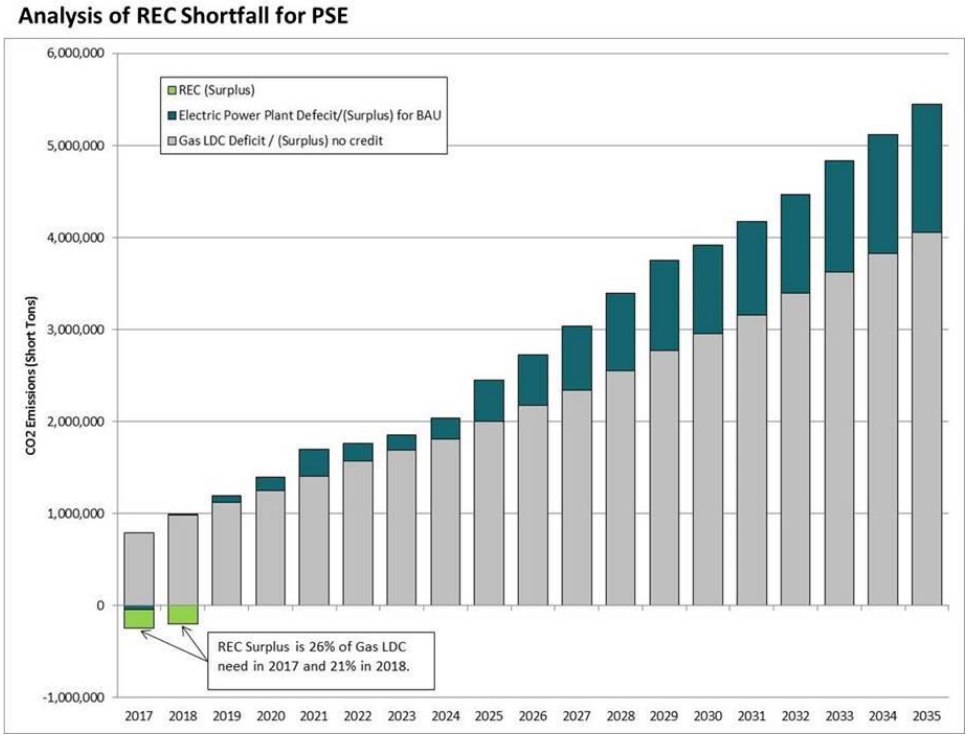

Figure 3.[141] Figure 3 shows the disparity between PSE's projected ERU need (on both the electric power and gas LDC sides) and projected surplus REC supply.

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[138] *See* Figure 3 (Reproduced as Appendix H).

[139] Although PSE currently has some surplus RECs, PSE eventually will need to build new wind projects to generate RECs to comply with the Washington EIA. PSE's analyses indicate that building additional wind projects (beyond those needed to comply with the EIA) to generate ERUs under CAR would cost around $107/ERU (based on conversion of .41 ERUs per MWh). *See* Appendix F ("CO_2 Offset Price Scenarios"). PSE will need over 4,000 MW of wind generation at a 34 percent capacity to meet its gas LDC ERU need in 2017. This grows to over 8,800 MW by 2035.

[140] PSE's estimated cost of $107/ERU might even be conservative. Other recent studies estimate renewable energy costs ranging from $162/metric ton CO_2 (to use wind power located in the Columbia River Gorge in 2030) to $200/metric ton CO_2 (to increase RPS standards across the Western Interconnection) to $250-$1,050 per metric ton CO_2 (to increase California's RPS from 33 percent to 40 or 50 percent). *See* Pacific Northwest Utilities Conference Committee, *Carbon Emissions: a Northwest Perspective* (July 2014) at 14, *available at* http://www.pnucc.org/sites/default/files/Carbon%20Emissions%20-%20a%20Northwest%20Perspective%20July%202014_0.pdf.

[141] Reproduced as Appendix H.

- **Energy Efficiency:** As discussed below in Section 3, Part III(i)-(ii), utilities may not be able to generate ERUs through investments in conservation and energy efficiency as CAR envisions. Assuming PSE *could* generate ERUs from energy efficiency measures beyond what existing law requires, *even maximizing those investments* (i.e., investing in *all* non-cost-effective energy conservation measures possible) would leave PSE with a significant ERU deficit.[142] Further, PSE's analyses indicate exorbitant costs from generating ERUs from non-cost-effective conservation, ranging from about $502/ERU to $1571/ERU for the electric side and about $4,433/ERU to $12,123/ERU for the gas LDC side.[143] Such prices make non-cost-effective energy efficiency an extremely impractical compliance option for utilities.

- **In-State Offset Projects and Programs:** CAR's descriptions of eligible ERU-generating projects and programs are vague and unclear as to which types of activities are eligible.[144] This makes it difficult to predict and analyze the emission reduction potential of in-state offsets. Many of listed eligible project types have limited potential for achieving reductions. For instance, the results from a recent study on the potential electric power production potential from diary digesters in Washington indicate that a full build-out of new dairy digester power plants would generate only about 35,380 ERUs per year.[145] By way of contrast, PSE's projected ERU shortfall begins at around 800,000 ERUs in 2017 and increases over time.[146]

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[142] *See* Appendix I ("ERU Potential From All Non-Cost-Effective Conservation (LDC Side)"); Appendix J ("ERU Potential From All Non-Cost-Effective Conservation (Electric Power Side)").

[143] *See* Appendix K ("Annual ERU Cost From Non-Cost Effective Conservation").

[144] *See* Proposed WAC 173-442-160. In particular, Ecology should clarify whether the following are eligible ERU-generating projects: (i) hydroelectric power generation projects that are ineligible for generating RECs (e.g., incremental hydro); (ii) emission reductions from encouraging switches to liquefied natural gas ("LNG") maritime fueling or to CNG fueling for trucks; and (iii) emission reductions for natural gas end-use (e.g., for home heating) that displaces electric load. Because natural gas use is a form of energy conservation in the home heating context, it would be arbitrary and capricious for Ecology to deny LDCs the opportunity to earn ERUs from these measures while allowing other conservation and energy efficiency measures to generate ERUs. *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c). Ecology also should clarify the meaning of the phrase "enforceable by the state of Washington." *See* Proposed WAC 173-442-150(1)(c).

[145] *See* Harris Group Inc., *Anaerobic Digesters Resource Assessment for PacifiCorp: Washington Service Territory*, Report 80306 (June 26, 2014), *available at* https://www.americanbiogascouncil.org/pdf/Anaerobic_Digesters_Resource_Assessment_PacifiCorp_06-24-2014.pdf. The study estimates that there are 11 potential dairy digester projects in Washington that would produce approximately 82 Gigawatt hours per year ("GWh/year"). *Id.* at 5. Assuming a 970 lbs CO_2/MWh offset, this would result in about 39,000 short tons (or about 35,380 metric tons) of avoided carbon emissions.

[146] *See* Figure 3 (Reproduced as Appendix H).

- **Allowances from External Markets and Registries:** First, CAR assumes ERUs can be generated from allowances purchased from external carbon markets and registries (as early as the first CAR compliance period). Yet, Ecology does not consider that CARB or another external carbon market authority might object to or even try to prohibit Washington CAR-covered parties from participating in that market. Second, increased demand for external allowances likely will drive up prices in those external markets. Yet, Ecology has not acknowledged or analyzed these price impacts. Finally, even if external allowances *are* a viable compliance option, Ecology is proposing to limit the number of external allowances that can be used for compliance in future CAR compliance periods, so these allowances will become woefully insufficient to meet ERU demand as the years go on.

(3) CAR's initial compliance period start date of 2017 (for most non-EITE covered parties) is too soon for reliable ERU markets to develop or for additional ERU-generating projects to get underway; and

(4) CAR appears to allow voluntary participants to repeatedly enter and opt-out of the ERU market,[147] potentially exacerbating uncertainty regarding the supply and demand of ERUs.

In short, the pieces are not in place for a predictable, functioning ERU market to develop on a timeframe that would ensure covered utilities' ability to comply with CAR. Moreover, it is by no means clear that there will be enough ERUs to meet PSE's demand without building very expensive renewable energy projects or implementing very expensive energy efficiency measures—all of which would have a profound impact on customer costs.

i. ERU market uncertainty makes it virtually impossible for electric utilities to ensure "least-cost" service to customers

Electric utilities have a statutory obligation to provide *least-cost* electricity to meet their customers' load demand.[148] The lack of ERU market certainty will make it difficult, if not impossible, for covered electric utilities to meet this obligation. It is arbitrary and capricious for Ecology to promulgate a rule that would put utilities in such an untenable position.[149]

For instance, the lack of a predictable ERU market would make it virtually impossible for PSE to determine how to run its power plants on a "least-cost" basis. PSE is a "winter load peaking" utility—meaning in-state load demands are highest in the winter. During the summer, when in-state load demands are lower, PSE often exports power to

[147] *See* Proposed WAC 173-442-030(6).

[148] WAC 480-100-238(1).

[149] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

California. *PSE applies proceeds from sales of this efficient exported power to keep Washington customer costs low throughout the year.* Under CAR, running sources more during the summer to provide power to California will cause those sources to emit more GHGs and, potentially, exceed their compliance pathway. If sources hit their CAR emission reduction pathway level by early fall (e.g., October), PSE would need to purchase ERUs to continue running those sources from November to December—when in-state demand will be greatest. But it will be impossible to predict the cost of the ERUs because their value will depend on myriad factors, such as temperature, rainfall and hydroelectric output, fuel prices, and availability of out-of-state electricity. Thus, selling power to California during the summer could become prohibitively risky because PSE could face an ERU shortfall and/or extremely high ERU prices in the later months of the year. This would cause customer electric costs to increase, *eliminating the benefit to customers that exporting summer power to California currently brings*. (This scenario especially will come into play during years with a hot California summer and a cold Washington winter). Thus, utilities like PSE *require* a market capable of providing clear price signals. Ecology has not done enough to ensure future ERU markets can provide this needed certainty.

ii. ERU market uncertainty will lead to unpredictable and unacceptable rate increases for gas utility customers

Under the proposed CAR, gas utility customers face a risk of unpredictable and unacceptable rate increases. LDCs—more than almost any other covered sector—have limited options for complying with CAR. For instance, there are few opportunities to reduce on-site emissions beyond fixing pipeline leaks (a relatively minor source of GHGs emissions). As a result, LDCs will need to rely on purchasing ERUs from other covered parties (or external carbon markets and registries) to comply with CAR. Given the ERU market uncertainties discussed above, LDCs face uncertain, and potentially significant, compliance costs. Customers ultimately would bear these costs in the form of higher natural gas rates. Ecology's failure to consider these cost impacts is arbitrary and capricious.[150]

For instance, as discussed above in Section 3, Part II, the ERU market may be significantly under-supplied to meet PSE's CAR compliance needs. The only viable market that exists today is the REC market. However, PSE's current surplus RECs are not sufficient to cover gas utility needs through even 2019.[151] If PSE has to pay the full cost of generating additional RECs to comply with CAR (i.e., $107/ERU), PSE's natural gas customers will experience *a 12 percent rate increase in 2017 and a cumulative rate increase of over 40 percent by 2035*.[152]

[150] *See id.*

[151] *See* Figure 3 (Reproduced as Appendix H).

[152] *See* Figure 4 (Reproduced as Appendix L).

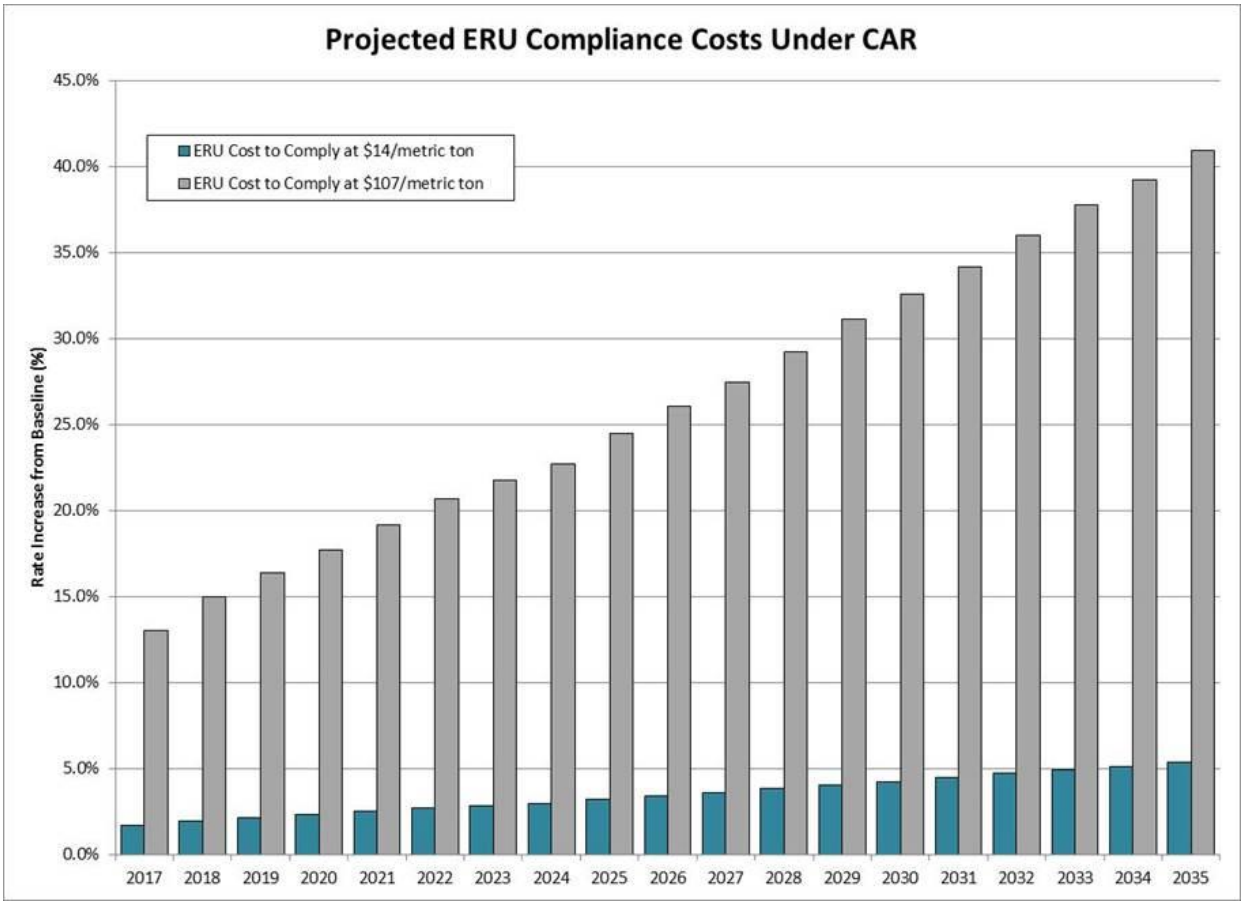

Figure 4.[153] Figure 4 shows the significant impact ERU prices could have on PSE gas utility customer rates. The chart reflects the potential rate impact resulting from ERU prices ranging from $14/ERU (blue bars) to $107/ERU (gray bars). PSE included a $14/ERU price because covered parties would be able to use CARB allowances to comply with CAR during early compliance periods. However, PSE does not believe the $14/ERU price is realistic. First, CARB expects its basic allowance price to increase over time as the CARB program becomes more restrictive. Second, increased demand from Washington sources will drive up CARB allowance prices. Third, CAR restricts the use of CARB allowances for compliance starting in 2023, which will require sources increasingly to rely on other, more expensive options—including the very expensive option of generating RECs. Thus, true rate impacts will be much higher than those shown in the blue bars above.

iii. ERU market uncertainty is compounded by variable weather patterns affecting emissions for the electric power and gas utility sectors

ERU market uncertainty will profoundly impact the electric power and gas utility sectors. Highly variable weather patterns drive the operations of these sectors. This variability can cause unpredictable and uncontrollable spikes in GHG emissions. As a result, electric utilities and LDCs face unique challenges in planning how to comply with CAR and

[153] Reproduced as Appendix L.

may be especially dependent on ERUs to satisfy compliance obligations.[154] Ecology's failure to consider or analyze these impacts is arbitrary and capricious.[155] For instance:

(1) **On the electric power side**, most electricity generation in Washington comes from hydroelectric power. The availability of hydroelectric power depends on highly variable forces, such as rainfall patterns. GHG emissions are *higher* in years with *lower* levels of hydroelectric generation and *lower* in years with *higher* levels of hydroelectric generation.[156]

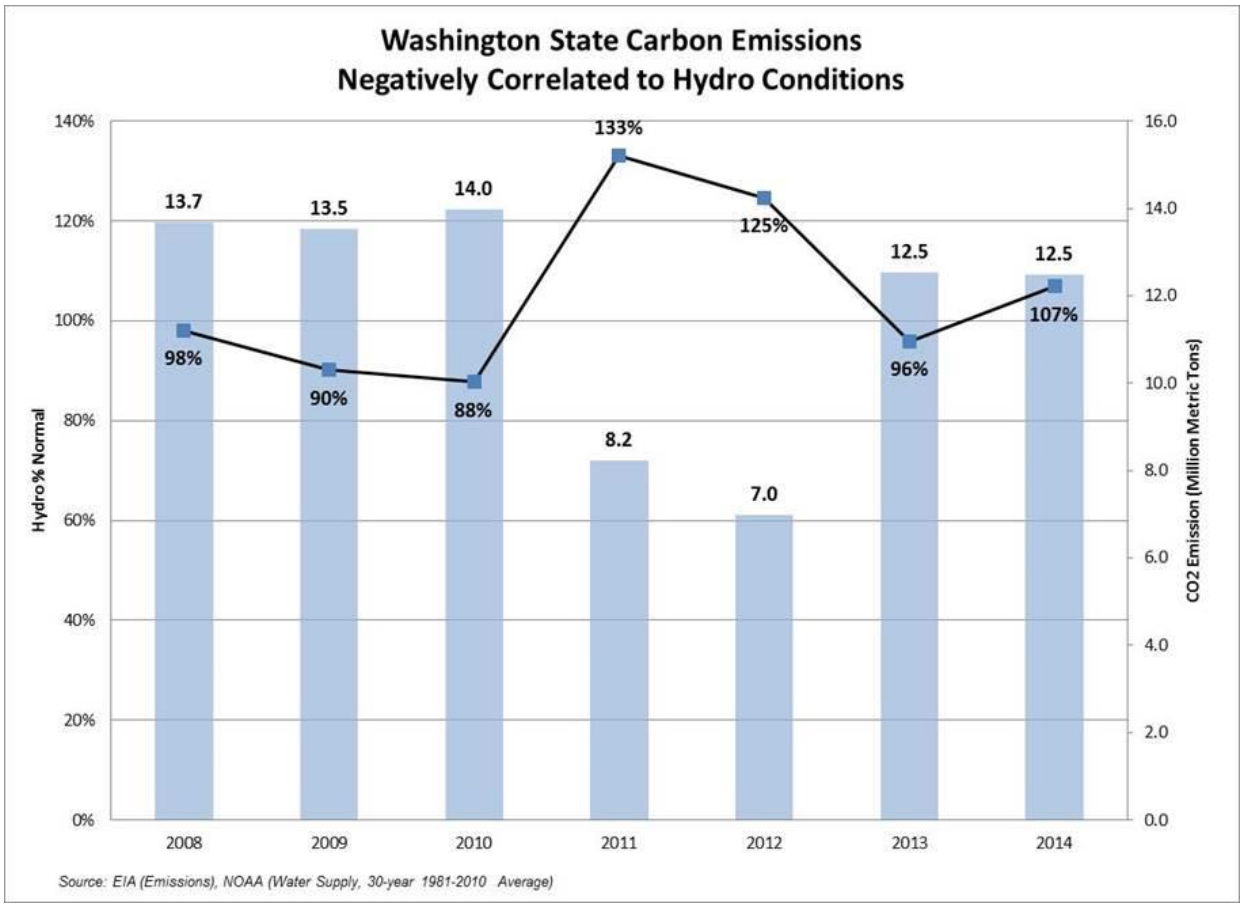

Figure 5.[157] Figure 5 demonstrates the inverse correlation between hydroelectric generation and CO_2 emissions in Washington. Figure 5 also demonstrates that 2011 and 2012 had unusually high levels of hydroelectric generation: 33 percent and 25 percent higher than the 30-year average, respectively. High levels of hydroelectric generation have a significant impact on levels of fossil generation and, thus, on emissions.

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[154] This also means that CAR's "straight line" declining emission reduction trajectory is unrealistic for these sectors. *See* Proposed WAC 173-442-060(1).

[155] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[156] *See* Figure 5 (Reproduced as Appendix M); *see also* Appendix N ("Thermal-Hydro Correlation: Total Emissions and Total Hydro Generation in Washington 1990-2014").

[157] Reproduced as Appendix M.

(2) **On the natural gas side**, demand for natural gas heating is driven by winter season temperatures. These temperatures can vary greatly from year to year.[158] GHG emissions are *higher* in years with *colder* winter season temperatures and *lower* in years with *warmer* winter season temperatures.

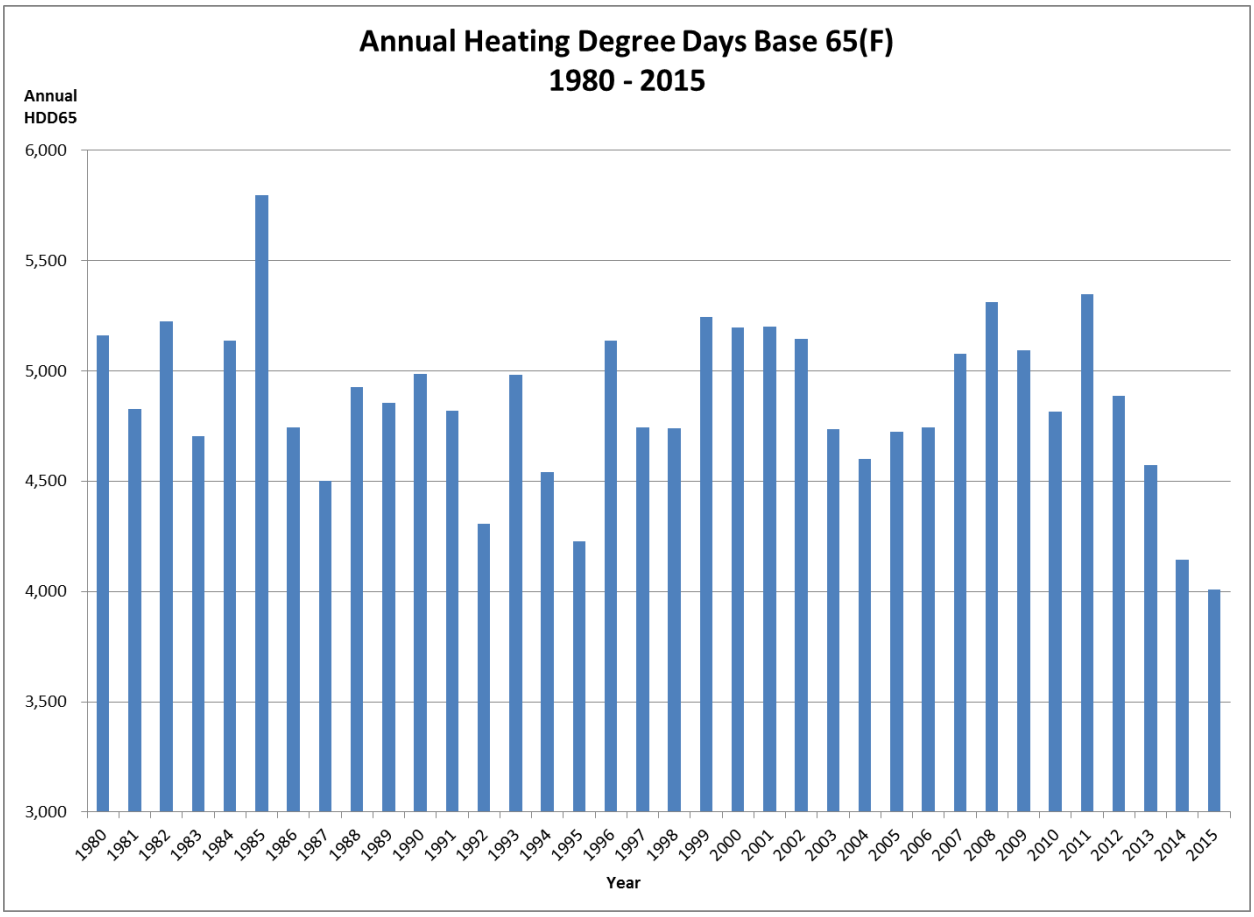

Figure 6.[159] Figure 6 shows historic annual heating degree day data in Washington and demonstrates that temperatures can fluctuate greatly on a year-to-year basis. Figure 6 also shows that 2014 and 2015 were unusually warm years.

The utility industry is compelled to operate and provide electric and gas service, irrespective of the variability in weather, costs, and demand. That makes CAR more impactful on utilities than on companies that do not have the same legal obligations.

[158] *See* Figure 6 (Reproduced as Appendix O).

[159] Reproduced as Appendix O.

III. CAR'S PROVISIONS ON ERU GENERATION ARE FUNDAMENTALLY FLAWED AS APPLIED TO ELECTRIC AND GAS UTILITIES

CAR's proposed provisions on ERU generation are fundamentally flawed, especially as applied to electric power and gas utilities. In general, CAR fails to understand, or harmonize its provisions with, other regulatory obligations and restrictions that Washington utilities face. These flaws will make it unduly burdensome, if not impossible, for covered electric power and LDC parties to comply with CAR.

i. CAR misunderstands how utility conservation programs work

CAR misunderstands how conservation programs for regulated electric and gas utilities work. Utilities are *required* to invest in cost-effective conservation. For instance, Washington's EIA requires electric utilities to "pursue *all available conservation that is cost-effective*, reliable, and feasible."[160] Washington Utilities and Transportation Commission ("WUTC") rules and policies place similar requirements on natural gas utilities.[161] Thus, Washington utilities already are making significant investments in energy efficiency.[162] WUTC's regulatory process generally calls for a utility to (i) develop conservation targets pursuant to an Integrated Resource Plan; (ii) develop implementation plans; (iii) file tariffs; and (iv) await WUTC approval of the tariff (which often occurs by WUTC order). Regulated utilities typically do not offer conservation programs outside of the WUTC's regulatory approval process.[163]

CAR provides that utilities could generate ERUs by investing in conservation and energy efficiency *beyond that* required by the EIA or WUTC rule or order.[164] However, this provision creates an untenable and illogical outcome. First, CAR *itself* will cause the level of investment that is "cost-effective" to increase (once the rule is in place and ERUs come to have a known value). That is, as the price of electricity increases under CAR (because of the financial burden the rule imposes on utilities), the value of energy efficiency investments correspondingly will increase. As a result, higher levels energy efficiency investments will

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[160] *See* RCW 19.285.040(a) (emphasis added). "Conservation" is "any reduction in electric power consumption resulting from increases in the efficiency of energy use, production, or distribution." RCW 19.285.030(6).

[161] *See*, *e.g.*, WAC 480-90-238(1).

[162] *See* WUTC, Company Conservation Programs, http://www.utc.wa.gov/regulatedindustries/utilities/energy/pages/companyprogramplansandtargets.aspx (last accessed July 21, 2016) (noting that "[u]tility efforts to conserve energy have contributed to Washington's top ten ranking in the American Council for an Energy Efficient Economy's State Energy Efficiency Scorecard since 2007"). Indeed, PSE has achieved a significant amount of energy efficiency over recent years. *See* Appendix P ("Avoided Emissions from Conservation 2010-2015 (Electric Power Side)"); Appendix Q ("Avoided Emissions from Conservation 2010-2015 (LDC Side)").

[163] CAR also fails to acknowledge that utilities cannot offer conservation services without an approved tariff revision. Generally, the WUTC has 30 days to act on a proposed tariff change. (If the WUTC does not act, the proposed change automatically goes into effect.)

[164] *See* Proposed WAC 173-442-160(5)(a).

become "cost-effective." CAR anticipates that these increased investments will be eligible to generate ERUs. Yet, *because* these investments are now "cost-effective," they also are now mandatory under the EIA and/or WUTC rules or orders. In other words, the investments are no longer "additional" to existing requirements. This creates an "endless loop" conundrum in which all CAR-driven investments essentially "convert" into EIA or WUTC-mandated investments. Thus, utilities may not be able to generate ERUs through investments in conservation and energy efficiency as CAR envisions.

PSE urges Ecology to recognize and explicitly address this scenario. Promulgating the rule without considering this potential conundrum would be arbitrary and capricious.[165] In particular, the final CAR should expressly provide that investments in energy conservation measures that would not be "cost effective" under the EIA or WUTC rules or orders *without* CAR will not be considered "cost effective" if CAR happens to make them cost-effective.

ii. CAR fails to understand the regulatory approval process for utilities

CAR also fails to understand the regulatory approval process for utilities. As a result, CAR would require utilities to make investments in energy efficiency that they legally cannot recover in order to be able to generate ERUs from those investments. As just discussed, Washington utilities generally are required to make all cost-effective investments in energy efficiency they can. Those *cost-effective* investments are eligible for recovery through the normal regulatory process. However, *non-cost-effective* investments—whether in energy efficiency, production, distribution, or elsewhere—are not eligible for recovery without a tariff or some other WUTC approval. Thus, utilities are constrained by law to make *only prudent, cost-effective* investments.

To the extent CAR avoids the conundrum outlined above and *does* allow utilities to generate ERUs from investments in energy efficiency beyond what the EIA and/or WUTC rules or orders require, CAR would force utilities into an untenable position. Utilities could generate ERUs under this provision *only by* making investments in energy efficiency that would not be cost-effective "but for" CAR. Because these investments would not be considered cost-effective, the investments likely would be ineligible for recovery. No rational utility will make an investment that is neither cost-effective nor recoverable. This is the "flip side" to the conundrum described above. Thus, once again, utilities may not be able to generate ERUs through investments in conservation and energy efficiency as CAR envisions.

[165] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

iii. CAR fails to recognize that electric utilities must be regulated on a *unit-by-unit basis* because of other statutory obligations

The proposed CAR is unclear as to whether covered electric utilities can (1) generate ERUs by reducing utilization at some generating units in their fleet and (2) use those generated ERUs for compliance by other generating units in the fleet. To comply with CAR, electric utilities *must* be able to generate ERUs by shifting generation among electric generating units in their fleet: that is, by reducing generation at some fossil units while increasing generation at others. Thus, CAR *must* regulate the electric power sector on a unit-by-unit—and not a plant-by-plant or facility-by-facility—basis.[166]

Electric utilities are obligated by statute to provide enough electricity to meet load demand.[167] This means the utilities' hands are tied: they cannot reduce *net* electricity generation below load demand—not even to comply with emission reduction obligations. Therefore, if one generating unit operates less in order to reduce emissions to comply with CAR, another generating unit must operate more to make up for the reduced output.

Further, electric utilities are obligated to provide *least-cost* electricity.[168] This means electric utilities must be able to manage their generation portfolio to shift generation away from higher-cost generating units and toward lower-cost generating units. Such generation-shifting will cause emissions from the lower-cost generating units to increase. These emissions increases could exceed CAR emission reduction pathway levels. Even so, the utility would remain obligated to continue operating that lower-cost generating unit.

For an electric utility to fulfill its statutory obligation to provide least-cost electricity to meet load demand while complying with CAR, the utility must be able to both (1) generate ERUs by reducing utilization at one or more higher-cost generating units in their fleet; and (2) use those ERUs to cover increased emissions from lower-cost generating units in their fleet (that will need to operate more to make up for the lost generation). Otherwise—because the lost generation must be replaced from *somewhere*—the utility will shift the generation out-of-state. As discussed above in Section 3, Part I(i), this is virtually certain to increase net GHG emissions.

Ecology also has ignored, or is unaware, of the transmission constraints or local transmission congestion problems that will make compliance difficult and more costly. Power transmission systems are built to use high voltage transmission lines to move power from generators and connections with adjacent utilities to substations where it flows out to customers. Such systems are interconnected webs, with multiple different paths available for power to flow on. When one element or part of the path is taken out of service, the flow necessarily will increase on the remaining path(s). Utilities use sophisticated computer

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[166] As discussed below in Section 5, Part V(ii), the proposed CAR also is unclear as to whether CAR compliance thresholds for stationary sources apply to units or to multi-unit aggregates. The final CAR should specify that covered "stationary sources" are *emitting units, not multi-unit aggregates* (e.g., facilities or plants).

[167] WAC 480-100-238(1).

[168] *Id*.

models to predict flows during planned and unplanned outages to avoid overloads and equipment damage by reconfiguring the system for planned outages, and in reacting to unplanned ones. For example, gas-fired units provide critical support to this system by quickly providing power and voltage stability (needed for efficiency and to protect equipment) to the system. Constraining or removing these tools will make operating and maintaining the system in compliance with national and regional reliability standards difficult, at times very difficult, and could ultimately, as a worst case, force operators to institute rolling blackouts. The system also must deal with local serve load pocket issues, i.e. areas that cannot be served by sources beyond the immediate area because of limited transmission capacity. Some generators have no choice but to operate such units to ensure reliable service irrespective of the GHG emissions from the units. This means that at least these generators could have limited compliance options, other than to acquire ERUs or external allowances.

iv. CAR risks requiring "double-compliance" from Washington natural gas generators importing power into California

The proposed CAR fails to recognize that Washington natural gas generators *already* have a compliance obligation under CARB for some of the power they generate. That is, a Washington electric generator must submit CARB allowances for certain power that is generated in Washington and imported into California.[169] Yet, it appears that the proposed CAR would *still require the generator to account for the emissions associated with that power under CAR*. This means that Washington natural gas generator operators, like PSE, might have to acquire "double" the number of compliance instruments to cover emissions from the same unit of generation: (1) a CAR ERU to generate the power in Washington; and (2) a CARB allowance to import the power into California. Finalizing CAR without considering this "double compliance" issue would be arbitrary and capricious."[170] This issue also implicates the dormant commerce clause for one or both of the programs.[171]

Notably, the CARB regulations exempt emissions from imported power *if* that power comes from a jurisdiction with a GHG emissions trading program that has been approved for linkage with the CARB program.[172] However, this exemption would not appear to apply to power imported from Washington with a program like CAR in place. CAR has not been approved by CARB for linkage with the CARB program; further, CAR, at most, would

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[169] *See* Cal. Code Regs. tit. 17, § 95811(b)(2); § 95802 (122). This is true for all imported power from "unspecified sources" and for imported power from "specified sources" emitting GHGs above a certain threshold. *See* § 95812(c)(2)(B).

[170] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[171] *See* Thomas Alcorn, *The Constitutionality of California's Cap-and-Trade Program and Recommendations for Design of Future State Programs*, 3 Mich. J. Envtl. & Admin. L. 87, 173 (2013) ("[I]t is possible that interstate commerce would be double charged or face inconsistent obligations if the same regulatory regime [as the CARB cap-and-trade program] were adopted in other states . . . If other states adopt cap-and-trade programs, a refusal by California to waive compliance obligations for electricity from those states might violate the dormant commerce clause because generators would be subject to duplicate, inconsistent regulations.").

[172] *See* Cal. Code Regs. tit. 17, § 95852(b).

establish only “one-way” linkage. Thus, the CARB regulations do not protect against “double-compliance.”

If the final CAR covers the electric power sector, the rule must include a mechanism to ensure it would not require this “double-compliance.” For instance, CAR could exempt emissions associated with power that is exported to California and covered under CARB. Alternatively, CAR could allow the generator to use allowances surrendered to CARB to comply with both CARB and CAR requirements.

Section 4: Policy Comments

I. CAR SHOULD NOT REGULATE THE ELECTRIC POWER SECTOR

i. The electric power sector is (and will continue) achieving significant emission reductions without CAR

Washington's electric power sector is heavily regulated and has achieved significant GHG emission reductions. This trend will continue without CAR. For instance:

- Washington has one of the most aggressive EPSs[173] in the nation.
- Washington was one of the first states to pass an RPS.[174]
- Washington's EIA already obligates electric utilities to make all cost-effective conservation measures they can.[175]
- Washington has a highly efficient electric power generation mix from an emissions standpoint. The primary source is hydroelectric power, along with substantial amounts of natural gas and increasing amounts of non-hydro renewables like wind and solar.
- *Washington's electric power sector already is expected to reduce its emissions to below the statutory target of 25 percent lower than 1990 levels by 2035,*[176] *without any further regulation*.[177]
- Washington's only coal plant, Centralia, is scheduled for full retirement over the next decade.[178] Centralia's shut-down alone will reduce the electric power sector's GHG emissions by about 60 percent.[179]

Further reductions from Washington's electric power sector will be difficult or impossible—and certainly not cost-effective. Thus, CAR-mandated reductions will lead to diminishing returns and unnecessary rising costs for ratepayers.[180]

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[173] *See* RCW 80.80.040. *See also* Appendix C ("Current State GHG Emission Performance Standards").

[174] *See* RCW 19.285.040.

[175] *See* RCW 19.285.040(1). WUTC rules and policies place a similar obligation on the state's natural gas utilities.

[176] *See* RCW 70.235.020(1)(a).

[177] *See* Appendix R ("Washington Electric CO_2 Emissions Comparison").

[178] *See* RCW 80.80.040(3)(c).

[179] *See* Figure 8 (Reproduced as Appendix U). *See also* Appendix S ("Washington Electric Sector CO_2 Emissions (by Facility)"). However, some "rebound" effect on emissions will occur if the state's natural gas units ramp up to replace Centralia's lost generation.

Moreover, Washington's electric power sector is a relatively small portion of the state's overall GHG emissions picture. The electric generating sources that would be regulated under CAR (i.e., natural gas generators) represent just 3 percent of in-state emissions.[181]

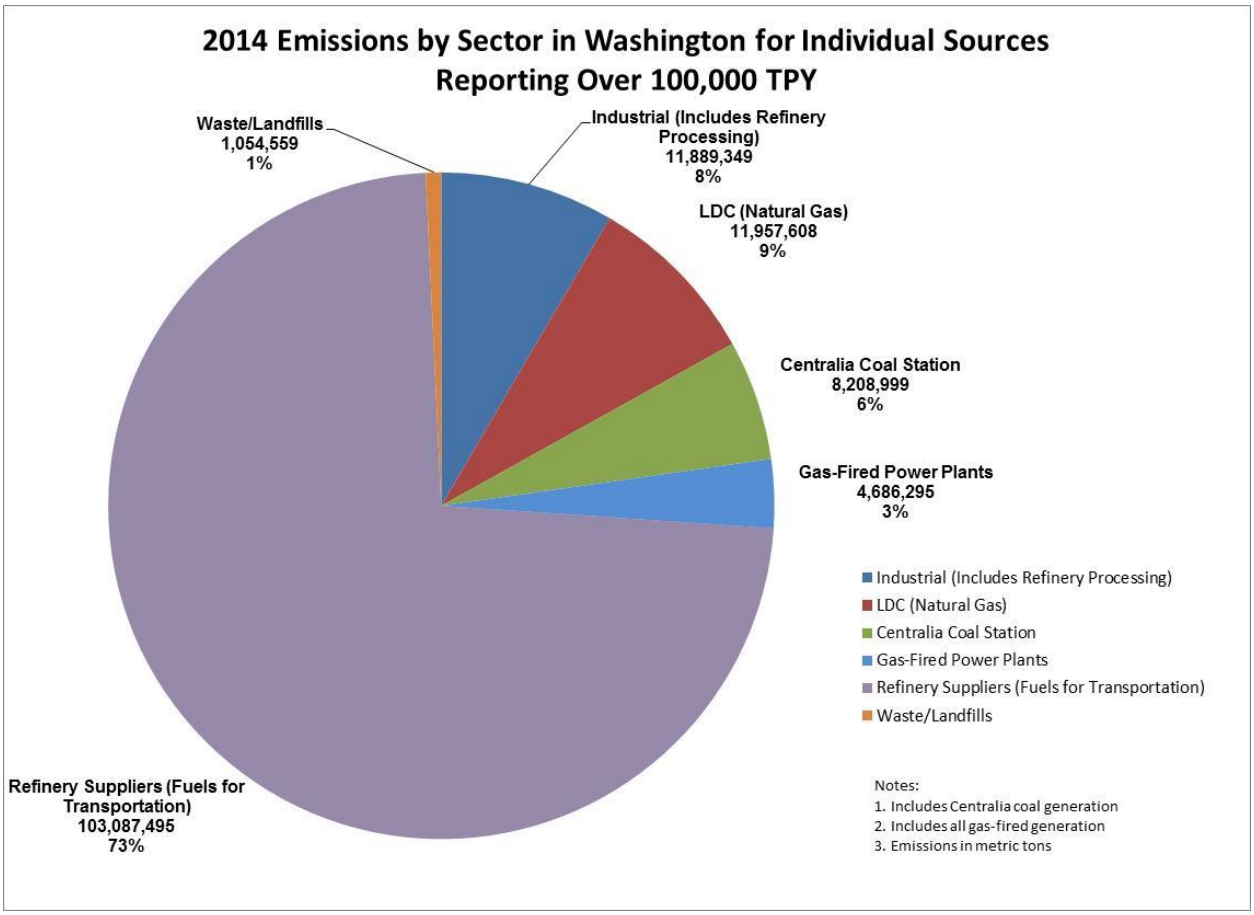

Figure 7.[182] Figure 7 demonstrates that the electric power sector as a whole (i.e., Centralia and gas-fired power plants) contributes less than 10 percent of Washington's GHG emissions. Washington's gas-fired power plants alone (the only electric generating sources that would be regulated under CAR) contribute just 3 percent of in-state emissions. The largest contributor to in-state emissions, by far, is the petroleum-based transportation fuel sector, which generates over seventy percent of the state's emissions.

With CAR, Ecology should focus on achieving emission reductions from the largest contributor to in-state emissions—the petroleum-based transportation fuel sector. Imposing additional reduction obligations on the electric power sector is unnecessary and

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[180] Further, as discussed above, CAR will have the unintended consequence of causing net GHG emissions from the electric power sector to *increase* on a regional basis.

[181] *See* Figure 7 (Reproduced as Appendix T).

[182] Reproduced as Appendix T.

unfair. The electric power sector already is doing its fair share to reduce emissions (including meeting its pro-rata share of the state's statutory emission reduction targets).

Alternatively, Ecology should set emission reduction targets under CAR on a pro rata, sector-by-sector basis—reflecting each sector's contribution to statewide emissions as a whole—instead of setting entity-specific emission reduction targets. Under this approach, the electric power sector would have no emission reduction requirement (as long as it continues to meet its pro-rata share of emission reductions). State policy supports this equitable approach.[183]

ii. Regulating the electric power sector will discourage emission reductions in the transportation sector

Further, regulating the electric power sector under CAR will *discourage* certain emission reduction measures in the transportation sector. For instance, CAR recognizes "improved efficiency of vehicle fleets" and "truck stop electrification" as eligible ERU-generating activities.[184] Ecology also anticipates that CAR will encourage more consumers to invest in electric vehicles, noting a "likely need to address a rise in demand for electricity to charge vehicle-charging stations."[185] (PSE currently has a pilot program to help customers defray the cost of installing in-home electric vehicle chargers.) As CAR causes electricity prices to go up, these transportation conservation measures will become more costly and thus less likely to occur. This will lead to continued reliance on gasoline-fueled vehicles—far and away the greatest source of GHGs in Washington.[186]

II. CAR SHOULD NOT REGULATE THE LDC SECTOR

i. LDCs are part of the solution, not the problem

Washington's LDCs provide natural gas to customers for a variety of end-uses across a range of sectors. Most notably, LDCs supply natural gas to power plants for electricity generation and to homes and businesses for heating. Natural gas provides a number of climate benefits, in part because:

- LDCs *already* must make all cost-effective conservation measures they can under WUTC rules and policies.[187]

- Natural gas releases just a fraction of the GHGs of other fossil fuels, including about half the CO_2 as coal.[188]

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[183] *See* RCW 70.94.011 ("It is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared *as equitably as possible* among all sources whose emissions cause air pollution.") (emphasis added).

[184] *See* Proposed WAC 173-442-160(3)(a).

[185] SEPA Checklist at 12.

[186] *See* Figure 7 (Reproduced as Appendix T).

[187] *See*, *e.g.*, WAC 480-90-238(1).

Thus, LDCs have played a critical role in achieving GHG emission reductions across a number of sectors of Washington's economy. In particular:

- **For electric generation**, LDCs support the transition away from coal to cleaner forms of power generation. Indeed, natural gas is a key "bridge fuel" in the transition to renewables. In the Pacific Northwest, natural gas is second only to hydropower as the most flexible resource available to operators. Natural gas generators are easily dispatched and capable of providing base load, intermediate, and peaking power. This makes natural gas generators well-suited for integrating intermittent renewable resources, like wind and solar power, into the electrical grid. Because hydroelectric generators are subject to varying hydrologic conditions from year to year, along with increasing operational and regulatory constraints (e.g., fish passage requirements), natural gas generators increasingly are needed to address load variability and supply firm backup to new intermittent renewable resources.

- **For heating**, LDCs have helped homes and businesses in Washington shift away from electricity or biomass (e.g., woodstoves) to natural gas. Direct use of natural gas for heating both conserves electricity and reduces emissions of GHGs and other conventional pollutants (such as fine particulates from wood combustion).[189] Indeed, *indirect* use of natural gas (i.e., burning gas in an electric generator and using that electricity for heating) emits 40-60 percent *more* CO_2 than if appliances remained gas-fueled.[190] Thus, direct natural gas use for heating is a form of energy conservation.

- **For the transportation sector**, replacing more traditional motor fuels with natural gas lowers emissions of a number of air contaminants, including CO_2, fine particulates, nitrogen oxides, and carbon monoxide. PSE is working to grow CNG use in vehicles and LNG use in marine vessels.

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[188] *See* U.S. Energy Information Administration, *How much carbon dioxide is produced when different fuels are burned?*, https://www.eia.gov/tools/faqs/faq.cfm?id=73&t=11 (last accessed July 21, 2016).

[189] *See* Pamela Lacey, American Gas Association ("AGA"), *AGA's Comments on Clean Power Plan Proposed Federal Plan and Model State Trading Rules – Supporting Natural Gas Direct Use and Combined Heat and Power as Compliance Options* (Jan. 21, 2016), *available at* https://www.aga.org/environmental-policy/environmental-comments/environmental-comments-2016-archive/aga-comments-epas; *see also* Richard Meyer, AGA, *Achieving Greenhouse Gas Reductions with Natural Gas in Homes and Businesses* (Nov. 16, 2015), *available at* https://www.aga.org/sites/default/files/dispatching_direct_use_-_achieving_greenhouse_gas_reductions_the_use_of_natural_gas_in_homes_and_businesses.pdf. ("AGA Gas Study").

[190] *See id.* at 10; *see also* Massachusetts Institute of Technology ("MIT"), *The Future of Natural Gas: An Interdisciplinary MIT Study* (June 2011) at 115, *available at* http://energy.mit.edu/publication/future-natural-gas/ ("MIT Gas Study").

Regulating LDCs under CAR threatens to reverse some of these climate gains and would be arbitrary and capricious.[191] This is because CAR would cause natural gas rates to go up. In the heating sector, customers likely would respond to higher natural gas prices by switching back to electricity and/or biomass to heat their homes and businesses. This fuel-switching would increase GHG emissions.[192] In the electricity sector, utilities likely would respond to higher in-state natural gas prices by importing more electricity from out-of-state. As discussed above in Section 3, Part I(i), this imported electricity generally will be higher-emitting than in-state gas generation. Finally, in the transportation sector, higher natural gas prices likely would discourage further investments in CNG use in vehicles. This would undercut a potential avenue for emission reductions in the transportation sector.

ii. Regulating LDCs will harm Washington's economy and job market

Regulating LDCs under CAR will shift money and jobs out of Washington. The proposed CAR places significant compliance obligations on LDCs. At the same time, it leaves LDCs with very limited options for meeting these obligations. This is because CAR regulates LDCs for *indirect* emissions associated with the end-use of products they deliver—emissions they do not (and cannot) directly control. The inevitable impacts on Washington's economy and job market are two-fold: (1) higher natural gas rates for customers, affecting everyone from low-income households to large city and county employers to schools; and (2) more money directly sent out-of-state by regulated LDCs so they can purchase external market allowances needed to comply with the rule. Failing to consider these impacts is arbitrary and capricious.[193]

LDCs have very limited options for directly reducing emissions to comply with CAR. LDC operations basically consist of pipelines. Other than fixing leaks (or selling less gas[194]), there is little LDC owners and operators can do to lower emissions.[195] As a result, LDCs will be forced to buy ERUs from other entities to meet virtually all of their compliance obligation. LDCs likely (especially during initial compliance periods) will obtain a significant number of these ERUs by purchasing allowances from external carbon markets (such as CARB). The revenues from these purchases will go to out-of-state entities. Because CAR does not contain direct mechanisms for generating revenue in-state (other than penalties for non-compliance), these exported dollars will not be "made up for" elsewhere under the program. LDCs ultimately will pass on these costs of purchasing credits from

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[191] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[192] *See* AGA Gas Study at 10; *see also* MIT Study at 115.

[193] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[194] LDCs have a statutory obligation to meet customer loads. RCW 80.28.110. Thus, Ecology cannot require LDCs to sell less product.

[195] Further, as discussed above in Section 3, Part III, LDCs already are obligated to make all cost-effective energy efficiency investments they can. Even if PSE were able to generate ERUs from making all *non cost-effective* energy investments possible, PSE would be left with a significant ERU shortfall. *See* Appendix I ("ERU Potential From All Non-Cost-Effective Conservation (LDC Side)"). Further, PSE's analyses indicate exorbitant costs from generating ERUs from non-cost-effective conservation, ranging from about $4,433/ERU to $12,123/ERU on the gas side. *See* Appendix K ("Annual ERU Cost from Non-Cost Effective Conservation").

external carbon programs to Washington customers. The net result will be a wealth-shift out-of-state *and* higher gas utility rates for in-state customers. To avoid harming Washington's economy and job market, CAR should not regulate LDCs.

Section 5: PSE's Recommended Changes to CAR

Ecology should not finalize CAR. Instead, Ecology should withdraw and continue to work on the rule, addressing the legal, policy, and implementation concerns raised throughout these comments. If Ecology does finalize CAR, the final rule should not regulate the electric power or LDC sectors. These two sectors represent *less than 13 percent* of all GHG emissions in Washington (even including all indirect emissions from LDC customers).[196]

If the final CAR *does* include the electric power and LDC sectors, PSE offers the following recommended changes to CAR. These proposals aim to enable the electric power and LDC sectors to comply with the rule, while maximizing real emission reductions and minimizing costs to Washington ratepayers.

I. PROPOSED EXEMPTION PROVISION FOR SOURCES THAT SHOULD NOT BE REGULATED BECAUSE NET GHG EMISSIONS WILL INCREASE

The final CAR should include an exemption provision for covered parties that demonstrate that reducing their in-state emissions would result in a net emissions increase from other sources. As discussed above in Section 3, Part I(i), CAR would have the unintended consequence of causing emissions from the electric power sector to increase, not decrease. These emissions increases would result from shifting emissions-generating activities to out-of-state sources.

PSE proposes the following exemption provision language:

Ecology shall waive the requirements of the rule for any affected entity upon a determination by the Washington Utilities and Transportation Commission (WUTC), that such affected entity, whether a stationary source owner or natural gas distributor, has demonstrated that reducing its GHG emissions in Washington to achieve compliance with the rule would result in a net increase in GHG emissions from other sources across the Western Interconnection (the region in which Washington utilities are electrically tied with other western electric generating sources).
In making such determination, the WUTC will evaluate whether (1) the entity has a legal duty to provide service to Washington residents; (2) service currently provided from in-state sources can be supplied by out-of-state stationary units, OR service can be replaced with a new functionally equivalent service from in-state or out-of-state GHG emissions sources; (3) the cost impact of the rule would affect the utilization of in-state sources; and (4) compliance with the rule is likely to result in a net increase in GHG emissions increase regionally (within the Western

[196] *See* Figure 7 (Reproduced as Appendix T). Washington's natural gas generators contribute about 3 percent of in-state emissions, while LDCs contribute about 9 percent of in-state emissions.

Interconnection) or would jeopardize the entity's ability to comply with its duty to provide service.

Such a provision is necessary to ensure CAR will achieve real and permanent GHG reductions—not just within Washington but regionally as well.

II. PROPOSED MECHANISM TO ACCOUNT FOR THE ELECTRIC POWER SECTOR'S NEED TO REPLACE CENTRALIA'S GENERATION

Ecology has not accounted for future emissions increases from the electric power sector when the Centralia units retire. This is arbitrary and capricious.[197] The final CAR must include a mechanism to allow Washington's natural gas generators to run more to replace Centralia's lost generation, *without* incurring additional compliance burdens for the increased emissions that would result. Otherwise, Washington utilities will shift this generation out-of-state (quite possibly to other coal units) to avoid CAR compliance obligations.

Centralia will partially retire by the end of 2020 and fully retire by the end of 2025.[198] Retiring Centralia will reduce carbon emissions from Washington's electric power sector by about 60 percent[199] and remove about 1,340 MW of baseload generation.[200]

[See Figure 8 on following page.]

[197] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

[198] *See* RCW 80.80.040(3)(c).

[199] *See* Figure 8 (Reproduced as Appendix U). *See also* Appendix S ("Washington Electric Sector CO_2 Emissions (by Facility)").

[200] PSE's actual contractual off-take quantities are: (1) 180 MW starting December 1, 2014; (2) 280 MW starting December 1, 2015; (3) 380 MW starting December 1, 2016; and (4) 300 MW starting January 1, 2025. The contract expires on December 31, 2025.

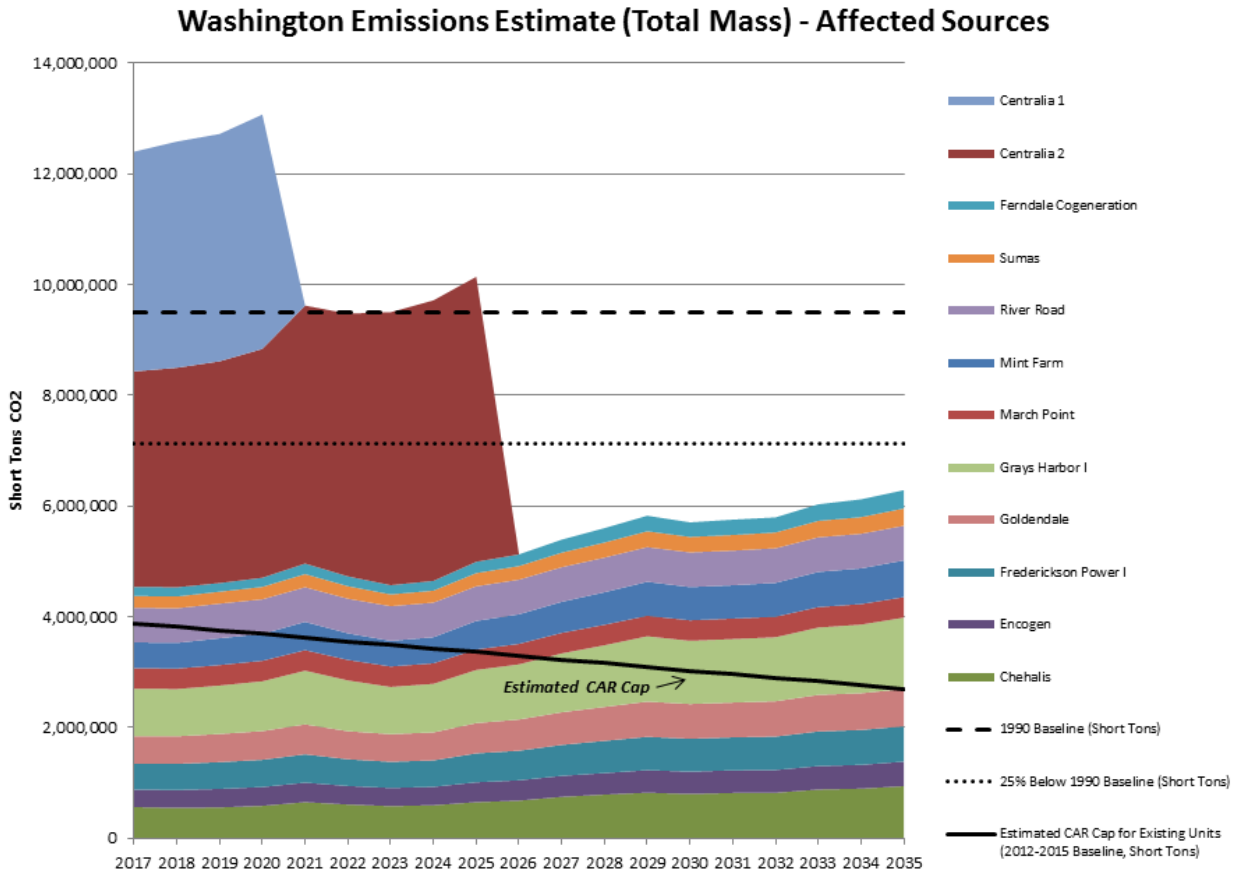

Figure 8.[201] After Centralia's two units retire at the end of 2020 and 2025, respectively, emissions from Washington's natural gas generating fleet will need to increase to make up for this lost generation. Yet, CAR's emissions "cap" for these units would continue to decline along a "straight line" emission reduction pathway.

Centralia's lost generation must be replaced. However, CAR does not provide enough "headroom" for the state's natural gas generators to run more to make up this replacement power. Nor is there enough time for the state's electric utilities to develop sufficient renewable capacity to make up the shortfall (at least not without extraordinary impacts on ratepayers). As a result, electric utilities likely will resort to importing out-of-state (and generally higher-emitting) generation. As discussed above in Section 3, Part I(i), this scenario is virtually certain to increase emissions on a regional level.

PSE proposes the following transition mechanism to allow electric utilities that have long term power purchase agreements for Centralia's electric generation to replace Centralia's lost generation with in-state generation sources, while maintaining compliance with CAR and RCW 80.80:

[201] Reproduced as Appendix U.

In each year following the date on which one of the units at the Centralia Power Plant ceases operations, for a total of five (5) years, Ecology shall issue to electric utilities that have power purchase agreements for Centralia's electric generation ERUs equal to 50 percent of the emissions of the retired Centralia unit's average annual emissions for the four (4) years prior to termination.
Ecology shall distribute the ERUs to companies who have long-term power purchase agreements for the output of Centralia, based on the pro-rata share of each company's off take/purchase from each Centralia unit's output between for the four (4) years prior to termination.

This mechanism would remove the incentive for Washington's electric power sector to replace Centralia's generation with (relatively higher-emitting) out-of-state natural gas and coal generation when it might otherwise replace this generation with (relatively lower-emitting) in-state natural gas generation.

III. PROPOSED MECHANISM TO AVOID INCENTIVIZING ELECTRIC UTILITIES TO OPERATE OUT-OF-STATE COAL UNITS *LONGER THAN PLANNED* AS A RESULT OF CAR

The final CAR should provide mitigation credit to Washington electric utilities for early retirements of out-of-state coal-fired electric generating units. As proposed, CAR would incentivize Washington electric utilities to run out-of-state coal units *as long as possible* to avoid having to run CAR-covered in-state fossil generators—possibly even longer than the utility originally planned to run the out-of-state unit. To avoid this unintended consequence, Ecology should include a mechanism in the final CAR to remove any incentive under CAR for a Washington electric utility to continue operating a coal-fired electric generating unit located outside of Washington longer than the utility would operate the unit in the absence of CAR.

PSE proposes the following basic mechanism:

Eligibility
Ecology shall grant mitigation emission reduction units ("m-ERUs") to any Washington electric utility with a partial or full ownership interest in a coal-fired electric generating unit located outside of Washington and supplying some or all of its power to Washington consumers if (i) the unit ceases operations; (ii) the utility submits a notification to Ecology that the unit has ceased operations; and (iii) the utility certifies to the closure of all GHG emitting processes and operations at the unit.
Ecology shall not grant any m-ERUs if the unit ceases operations on or after a date on which the unit is required to cease operating as a result of any court order or

legally enforceable settlement agreement.
Allocation
An electric utility eligible for m-ERUs will receive m-ERUs on a "lump sum" allocation: The amount of m-ERUs that Ecology shall grant to the Washington electric utility will be equal to the amount of emissions that the unit emitted on average during the four (4) years prior to the date on which the unit ceases operations divided by twelve (12) times the months between the date the unit ceases operation and the required shutdown date.
Mitigation ERUs
Each m-ERU shall be equivalent to one metric ton of CO_2e.
An m-ERU is distinct from an ERU or a REC.
m-ERU Use and Use Restrictions
The Washington electric utility receiving the m-ERUs can use the m-ERUs only for CAR compliance. The Washington electric utility receiving the m-ERUs cannot sell, trade, or otherwise exchange or transfer the m-ERUs to any other covered party or to any third party. The Washington electric utility receiving the m-ERUs can use the m-ERUs to meet the CAR compliance burden of any of the utility's covered sources. When an m-ERU is used for CAR compliance, it will "convert" into an ERU and be immediately retired. An m-ERU cannot convert into an ERU for any other purpose (i.e., to be sold or traded on the ERU market.)
The Washington electric utility receiving the m-ERUs can use the m-ERUs for compliance only during a year in which one or more of the utility's covered sources has reported GHG emissions over its emission reduction pathway level established under CAR.
Banking
m-ERUs can be banked for up to sixteen (16) years.
If an m-ERU has not been used for CAR compliance within sixteen (16) years after the date on which the m-ERU is issued, the m-ERU will expire.

IV. PROPOSED MECHANISM TO EXCLUDE HIGH-HYDRO YEARS FROM THE BASELINE PERIOD FOR THE ELECTRIC POWER SECTOR

The final CAR should provide a mechanism for excluding years with unusually high levels of hydroelectric generation from the baseline GHG emissions level calculation for covered electric power sector sources. The proposed CAR's default "Category 1" baseline period for non-EITE covered sources[202] is flawed for the electric power sector because it includes 2012, a year with an unusually high level of hydroelectric generation. In Washington, hydropower production was about 25 percent higher in 2012 than the long-term 30-year average rate.[203] The unusually high level of hydroelectric generation resulted in unusually low levels of fossil generation (because Washington's fossil generators dispatch only after all hydropower and wind resources have been fully allocated). Correspondingly, GHG emissions levels from the electric power sector in 2012 were unusually low.[204] Including 2012 in the baseline period for covered electric power sources skews baseline emissions levels unrealistically high.[205] This makes it difficult if not impossible to comply with CAR. Setting baselines for covered electric power sector sources that include such high-hydro years would be arbitrary and capricious.[206]

PSE urges Ecology to provide an explicit mechanism in the final CAR for excluding high-hydro years from the baseline period for covered electric power sources. Specifically, Ecology should include an additional provision under WAC 173-442-050(3) as follows:

> 173-442-050(3)(c) Ecology shall omit any calendar year from calculating the baseline GHG emissions value for covered electric generating sources that includes hydroelectric power generation that is more than 20% greater than the 30-year average level of hydroelectric power generation for Washington.

[202] CAR's default "Category 1" baseline emissions value for non-EITE covered parties is calculated based on an average of five years of covered GHG emissions data between 2012 through 2016. *See* Proposed WAC 173-442-050(3)(a)(1).

[203] *See* Figure 5 (Reproduced as Appendix M); *see also* Appendix N ("Thermal-Hydro Correlation: Total Emissions and Total Hydro Generation in Washington 1990-2014").

[204] *See* Figure 5 (Reproduced as Appendix M); *see also* Appendix N ("Thermal-Hydro Correlation: Total Emissions and Total Hydro Generation in Washington 1990-2014").

[205] Notably, EPA made adjustments to state-level 2012 state for Washington (among other states) between the proposed and final CPP to "better reflect fossil generation levels when hydro generation performed at its average level as observed over a 1990–2012 timeframe." 80 Fed. Reg. at 64,815. In making these adjustments, EPA recognized that "variation in the hydrologic cycle does fundamentally change the generating potential of the state's power fleet in hydro-intensive states as they no longer have the same generating potential in an average year as they had in a 'high hydro' year." *Id.*

[206] *See Washington Indep. Tel. Ass'n*, 148 Wash. 2d at 905; RCW 34.05.570(2)(c).

V. OTHER RECOMMENDATIONS AND REQUESTS FOR CLARIFICATION

i. CAR should allow unlimited ERU banking and borrowing

CAR should not restrict ERU banking and borrowing. The proposed CAR would restrict ERU banking to a 10-year period.[207] The proposed rule does not address ERU borrowing. Ecology offers no justification (legal or policy) for why CAR should restrict ERU banking or borrowing. (In fact, Ecology cites no clear source of its authority to create ERUs in the first place.[208]) Such restrictions are unnecessary and will impede the efficiency of the ERU market.

To the extent Ecology has authority to create ERUs, there is nothing that would require Ecology to restrict ERU banking or borrowing. The WA CAA and Ecology's regulations address only ERCs, not ERUs. (In fact, Ecology appears to have created the concept of an ERU "whole-cloth" for CAR.) Thus, restrictions on ERCs—including the 10-year restriction on ERC duration[209]—apply only to ERCs, not ERUs. Ecology has discretion to allow unlimited ERU banking and borrowing.

PSE urges Ecology to remove the 10-year restriction on ERU banking in the final CAR. Further, Ecology should expressly provide in the final CAR that covered parties can "borrow" ERUs from future compliance periods (e.g., use an ERU from 2021 to meet requirements for 2017).

ii. CAR should specify that compliance thresholds for stationary sources apply to *units* and not *multi-unit aggregates*

As discussed above in Section 3, Part III(iii), CAR *must regulate the electric power sector on a unit-by-unit basis* to ensure the sector can comply with the rule. However, the proposed CAR is unclear as to whether compliance thresholds for stationary sources apply to *units* or *multi-unit aggregates.* Instead, the rule forces covered parties down a maze of confusing and potentially contradictory regulatory definitions. This ambiguity makes it difficult for electric utilities to determine something as basic and crucial as whether *unit* or *plant* emissions will trigger CAR compliance obligations.

First, CAR states that compliance thresholds apply to "[a] covered party with covered GHG emissions that are greater than or equal to the compliance threshold" listed in

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[207] Proposed WAC 173-442-130(1).

[208] Ecology does not appear to base its authority to create and manage ERUs in RCW 70.94.850—nor could it. This provision gives Ecology authority to implement an "emission credits banking program," under which the agency could accept emission reduction credits ("ERCs") for compliance with the state's prevention of significant deterioration, new source review, and bubble programs. Because CAR does not resemble these programs, the CAR trading program cannot qualify as an "emission credits banking program" under the WA CAA, and ERUs cannot be considered ERCs. It is unclear where else Ecology might derive its authority to create ERUs and manage an ERU trading program.

[209] WAC 173-400-136(5).

CAR.[210] CAR defines a "covered party," in turn, as "the owner or operator of a . . . *[s]tationary source* located in Washington."[211] CAR also defines "[c]overed stationary source GHG emissions" as "GHG emissions from *source categories* listed in [the Washington GHG Reporting Rule]."[212] CAR does not define "stationary source." Accordingly, the definition from the Washington GHG Reporting Rule should apply;[213] if that rule provides no definition, the definition from Ecology's general regulations for air pollution sources should apply.[214]

The Washington GHG Reporting Rule does not define "stationary source." However, the rule does define the "electricity generation source category" as "compris[ing] *electricity generating units*[.]"[215] This definition suggests that covered stationary sources under CAR are *individual emitting units* with emissions above the applicable threshold. Ecology's air pollution source regulations, however, define "stationary source," as "*any building, structure, facility, or installation* which emits or may emit any air contaminant."[216] This definition suggests that covered stationary sources under CAR are *multi-unit emitting facilities* (e.g., power plants) with emissions above the applicable threshold.

PSE urges Ecology to clarify the definition of "stationary source" in the final CAR. In particular, Ecology should define a covered "stationary source" as an *emitting unit* with emissions above the applicable threshold. Ecology should further clarify that compliance thresholds are not applicable to aggregate emissions from multiple emitting units. Importantly, CAR, as written, provides a perverse incentive for utilities to site new generating units at greenfield sites instead of expanding generation at existing source sites—even though adding new units to existing facilities would often be the cheaper and less environmentally-impactful option.

iii. CAR must expressly allow electric utilities to (1) generate ERUs by reducing utilization at some generating units in their fleet and (2) use those generated ERUs for compliance by other generating units in the fleet

If the final CAR covers the electricity sector, PSE urges Ecology to include an express provision stating that covered electric utilities can (1) generate ERUs by reducing utilization at some generating units in their fleet and (2) use those generated ERUs for compliance by other generating units in the fleet. As discussed above in Section 3, Part III(iii), such a provision is necessary for electric utilities to be able to manage their

[210] Proposed WAC 173-442-030(3).

[211] Proposed WAC 173-442-020(1)(j) (emphasis added).

[212] Proposed WAC 173-442-020(1)(i)(i) (emphasis added).

[213] *See* Proposed WAC 173-442-020(2).

[214] *See* Proposed WAC 173-442-020(3).

[215] WAC 173-441-120, § 98.40(a) (emphasis added).

[216] WAC 173-400-030(86) (emphasis added).

generating portfolios to minimize compliance costs, fulfill their other statutory obligations, and maintain reliability. Further, without such a provision, the incentives under CAR for electric utilities to shift electric generation out-of-state are even stronger. Utilities will reduce utilization at in-state sources to generate ERUs. Instead of using those ERUs to enable *other in-state sources* in the utility fleet to ramp up operations, a utility will sell those ERUs to other covered parties and replace the lost generation with imported electricity from (generally higher-emitting) out-of-state units.[217] As discussed above in Section 3(I)(i), this scenario is virtually certain to increase emissions on a regional basis.[218]

iv. CAR should not restrict eligible offset ERU generating activities to in-state projects and programs

As discussed above in Section 2, Part II(i), the proposed CAR's limits on offsets to *in-state* projects and programs would violate the dormant commerce clause. PSE urges Ecology to allow covered parties to purchase offset credits from both in-state and out-of-state sources in the final CAR. At minimum, the final CAR should allow covered parties to use CARB-issued "ARB offset credits"[219] from CARB programs, such as livestock, mine methane capture, and ozone depleting substance programs.[220] Further, the final CAR should allow covered parties to use CARB-approved "registry offset credits" from offset projects registered on the American Carbon Registry or the Carbon Action Registry.[221] Like CAR, CARB requires that offset credits be "real, additional, quantifiable, permanent, verifiable, and enforceable."[222] Allowing CAR-covered parties to use CARB-issued and CARB-approved offset credits could help ensure low CAR compliance costs *while still* limiting eligible offset activities to approved, third-party verified carbon reductions.

v. CAR should not limit the use of external allowances for compliance over time

As discussed above in Section 2, Part II(ii), the proposed CAR's limits on how many external allowances covered parties could use to meet CAR compliance obligations over time would violate the dormant commerce clause. PSE urges Ecology to remove CAR's declining limits on the use of external allowances. Such limits were not a part of the January 2016 version of the proposed CAR and should not be a part of the final CAR. In addition to violating the dormant commerce clause, these limits are bad policy. They will constrain trading markets, making it more difficult and more expensive to comply with CAR over

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[217] Ecology could not guard against such emissions "leakage"—for instance, by restricting ERU generation associated with increased imports of electricity—without violating the dormant commerce clause.

[218] *See* Figure 2 (Reproduced as Appendix E); *see also* Appendix F ("CO_2 Offset Price Scenarios").

[219] *See* Cal. Code Regs. tit. 17, § 95802(a)(14); §§ 95970-88.

[220] Indeed, the January 2016 version of the proposed CAR expressly provided that these were eligible ERU-generating programs. *See* January 2016 Proposed CAR, WAC 173-442-120(4).

[221] *See* Cal. Code Regs. tit. 17, § 95802(a)(326), §§ 95970-88. CARB has multiple levels of approval for issuing registry offset credits. *See* § 95970(a), § 95980-80.1.

[222] § 95802(a)(14), § 95802(a)(326).

time. LDCs will be especially hard hit—something Ecology seems to recognize (but for which it fails to offer any solution).[223]

vi. CAR should not restrict eligible external carbon markets to "multi-sector" markets

The proposed CAR should not restrict external allowance purchases to those from "multi-sector" carbon markets.[224] PSE urges Ecology to allow the use of compliance instruments from "single-sector" markets like RGGI and future CPP trading programs as well. (As discussed above in Section 5, Part V(iv), Ecology should also allow CAR-covered parties to use CARB-approved offset credits from carbon registries to generate ERUs.) A broader network of potential trading partners will increase market liquidity and make it easier and cheaper to comply with CAR. Further, to the extent CAR has extraterritorial price impacts that raise dormant commerce clause concerns (as discussed above in Section 2, Part II(iii)), a wider range of external markets from which covered parties could "shop" would minimize price effects on any one market, such as CARB.

At minimum, Ecology should recognize that its assumptions about external market prices in CAR's Cost-Benefit analysis are inaccurate because CAR *itself* is likely to drive up external allowance prices. Thus, complying with CAR is likely to be much more costly than Ecology has estimated.

vii. Ecology should increase the opt-out emissions threshold and clarify the opt-out process

Under the proposed CAR, a covered party is eligible to opt-out of the program if its emissions drop below 50,000 $MtCO_2e$ for three consecutive years.[225] In the previously proposed version of CAR, the opt-out threshold was 70,000 $MtCO_2e$.[226] CAR should not have a separate emissions threshold for opting out of the program. Covered parties should be eligible for opting-out if their emissions fall below the relevant compliance threshold (e.g., 100,000 $MtCO_2e$/year) for three consecutive years. If Ecology maintains a separate opt-out threshold in the final CAR, then the threshold should be *no lower than* 70,000 $MtCO_2e$: the lowest compliance threshold under CAR.

PSE also requests Ecology to clarify:

- *That there will be no involuntary "out-opts" of the program*. If a covered party's emissions drop below the 50,000 $MtCO_2e$ threshold for three or more years but the party *does not* fulfill the other requirements of WAC 73-442-

[223] *See* Cost-Benefit Analysis at 24 (noting that LDCs "have little or no options for on-site compliance but may still combine project-based, market, and REC reductions. *However, the proposed rule limits the use of allowances (market purchases) for compliance*.") (emphasis added).

[224] *See* Proposed WAC 173-442-170(1)(a).

[225] Proposed WAC 173-442-210(7)(a).

[226] *See* January 2016 Proposed CAR, WAC 173-442-060.

210(7) (e.g., notify Ecology of intent to discontinue compliance reporting), the party should not be forced to opt-out of the program if it wishes to remain in the program and continue generating ERUs.

- *How LDCs are Affected When Their Customers Opt-Out and Opt-In of the Program.* The proposed CAR provides that LDCs have a compliance obligation for the indirect emissions of their customers who are *not* covered by CAR (e.g., homes and businesses), but not for those customers who *are* covered by CAR (e.g., large electric power generators).[227] However, some parties that are not initially covered by CAR may voluntarily "opt-in" to the program or trigger the applicable compliance threshold. Likewise, parties that are initially covered by CAR may become eligible to "opt-out" of the program. An LDC may not know whether a customer's coverage status has changed until after the LDC has surrendered compliance instruments for the relevant compliance period. The proposed CAR is unclear as to (i) which party (i.e., the LDC or the customer) is responsible for emissions and over what time periods *when an initially uncovered party becomes subject to the program*; and (ii) which party is responsible for emissions and over what time periods *when an initially covered party opts-out of the program*. If Ecology regulates LDCs for their indirect emissions under CAR, Ecology must clarify how these scenarios will play out so that LDCs can plan for compliance.

- *The process for voluntarily opting back into the CAR program after a party opts out*. The proposed CAR does not directly address whether a party that opts-out of the program during one compliance period can voluntarily re-enter the program in a later compliance period. (However, nothing in the proposed rule appears to preclude this.) Ecology should clarify this in the final rule.

viii. Ecology should clarify provisions on reserve ERUs

Under the proposed CAR, Ecology proposes to hold some generated ERUs in reserve.[228] Ecology would use these reserve ERUs to offset emissions associated with certain activities, including the start-up of curtailed facilities.[229]

PSE requests Ecology to clarify:

- *Whether covered electric power sector sources are eligible for reserve ERUs.* Specifically, Ecology should clarify whether (i) covered electric generating sources that experience increased utilization due to the retirement of the Centralia units (or out-of-state coal units supplying power into Washington)

[227] *See* Proposed WAC 173-442-050(2)(a).

[228] Proposed WAC 173-442-240(1). For instance, Ecology would confiscate two percent of each non-EITE covered party's emission reduction pathway annual decrease for the reserve.

[229] Proposed WAC 173-442-240(4).

are eligible for reserve ERUs; and (ii) covered electric generating sources that curtail operations and restart operations are eligible for reserve ERUs.

- *The meaning of the phrase "harmonizing of ERU generation with reduced GHG emissions."*[230] Ecology should clarify in the final rule what "harmonization" would entail.

[230] Proposed WAC 173-442-240(4)(d).

Section 6: Conclusion

PSE appreciates the opportunity to submit comments on Ecology's proposed CAR. While PSE recognizes the importance of addressing climate change, PSE believes that Ecology lacks legal authority to promulgate CAR. Further, CAR as proposed is fundamentally flawed and unlikely to achieve its intended goals. Ecology should withdraw the proposed rule and address the legal, technical, and policy concerns raised in these comments. Most critically, Ecology should (1) exclude the electric power sector from the final CAR because regulating this sector will cause net regional GHG emissions to increase and undermine Washington's efforts to comply with the federal CPP; and (2) exclude the LDC sector from the final CAR because Ecology lacks legal authority to regulate this sector's indirect emissions, and, even if Ecology had such authority, regulating this sector would cause unacceptable rate increases for LDC customers. Should Ecology proceed with finalizing the rule, PSE urges Ecology to adopt the proposed mechanisms and other recommendations outlined in these comments.

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Respectfully submitted,

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